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## THE EAGLE'S NEST.

## TEN LECTURES

## ON THE RELATION OF

## NATURAL SCIENCE TO ART.

GIVEN BEFORE THE UNIVERSITY OF OXFORD

In Lent Term, 1872.

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## PREFACE.

ine following Lectures have been written, not with less care but with less pains, than any in former courses, becano no labour could have rendered them exhaustive statements of their subjects, and I wished, therefore, to take from them every appearance of pretending to be so: but the assertions I lave made are entirely deliberate, thongh their terms are unstudied; and the one which to the general reader will appear most startling, that the study of anatomy is destructive to art, is instantly necessary in explanation of the system adopted for the direction of my Oxford schools.

At the period when engraving might have become to art what printing became to literature, the four greatest point-dranghtsmen hitherto known, Mantegna, Sandro Botticelli, Durer, and Holbein, occupied themselves in the new industry. All these four men were as high in intellect and moral sentiment as in art-power; and if they had engraved as Giotto painted, with popular and unscientific simplicity, would have left an inexhaustible series of prints, delightful to the most innocent minds, and 3trengthening to the most noble.

But two of them, Mantegria and Durer, were so polluted and paralyzed by the study of anatomy that the former's best works (the magnificent mythology of the Vices in the Louvre, for instance) are entirely revolting to all women and children; while Durer never could draw one beautiful female form or face; and, of his important plates, only four, the Melencholia, St. Jerome in his study, St. Hubert, and Knight and Death, are of any use for popular instruction, because in these only, the figures being fully draped or armed, he was enabled to think and feel rightly, being delivered from the ghastly toil of bonedelineation.

Botticelli and Holbein studied the face first, and the limbs secondarily ; and the works they have left are therefore without exception precious; yet saddened and corrupted by the influence which the contemporary masters of body-drawing exercised on them; and at last eelipsed by their false fame. I purpose, therefore, in my next course of lectures, to explain the relation of these two draughts men to other masters of design, and of engraving.

[^0]
## THE EAGLE'S NEST.

## LECTURE I .

of WISDOM AND FOLLY IN ART.*

8th February, 1872.

1. The Lectures I have given hitherto, though, in the matter of them conscientiously addressed to my undergraduate pupils, yet were greatly modified in method by my feeling that this undergraduate class, to which I wished to speak, was indeed a somewhat imaginary one; and that, in truth, I was addressing a mixed audience, in greater part composed of the masters of the University, before whom it was my duty to lay down the prineiples on which I hoped to condnet, or prepare the way for the conduct of, these schools, rather than to enter on the immediate work of elementary teaching. But to-day, and henceforward most frequently, we are to be engaged in

[^1]definite, and, I trust, continuous studies; and from this time forward, I addrese myself wholly to my undergraduate pupils; and wish only that my Lectures may be serviceable to them, and, as far as the subject may admit of it, interesting.
2. And, farther still, I must ask even my younger hearers to pardon me if I treat that subject in a somewhat narrow, and simple way. They have a great deal of hard work to do in other schools: in these, they must not think that I underrate their powers, if I endeavour to make everything as easy to them as possible. No study that is worth pursuing seriously can be pursued without effort; but we need never make the effort painful merely for the sake of preserving our dignity. Also, I shall make my Lectures shorter than heretofore. What I tell you, I wish you to remember ; and I do not think it possible for you to remember well much more than $I$ can easily tell you in half-an-hour. I will promise that, at all events, you shall always be released so well within the hour, that you can keep any appointment accurately for the next. Yon will not think me indolent in doing this; for, in the first place, I can assure yon, it sometimes takes me a week to think over what it does not take a minute to say: and, secondly, believe me, the least part of the work of any sound art-teacher must be his talking. Nay, most deeply also, it is to be wished that, with respeet to the study which I have to bring before you to-day, in its relation to art, namely, natural philisophy, the teachers of
it, up to this present century, had done less work in talk ing, and more in observing: and it would be well even for the men of this century, pre-eminent and accomplished as they are in accuracy of observation, if they had completely conquered the old habit of considering, with respect to any matter, rather what is to be said, than what is to be known.
3. Yon will, perhaps, readily admit this with respect to science; and believe my assertion of it with respect to art. You will feel the probable mischief, in both these domains of intellect, which must follow on the desire rather to talk than to know, and rather to talk than to do. But the third domain, into the midst of which, here, in Oxford, science and art seem to have thrust themselves hotly, like intrusive rocks, not without grim disturbance of the anciently fruitful plain;-your Kingdom or Princedom of Literature? Can we carry our statement into a third parallelism, for that? It is ill for Science, we say, when men desire to talk rather than to know ; ill for Art, when they desire to talk rather than to do. Inl for Literature when they desire to talk,-is it? and rather than-what else? Perhaps yon think that literature means nothing else than talking? that the triple powers of science, art, and scholarship, mean simply the powers of knowing, doing, and saying. But that is not so in any wise. The faculty of saying or writing anything well, is an art, just as much as any other; and founded on a science as definite as any other. Professor Max Müller
teaches you the science of language; and there are people who will tell you that the only art I can teach yon myself, is the art of it. But try your triple parallelism once more, briefly, and see if another idea will not occur to you. In science, you must not talk before you know. In art, you must not talk before you do. In literature, you must not talk before you-think.

That is your third Province. The Kingdom of Thought, or Conception.

And it is entirely desirable that you should define to yourselves the three great occupations of men in these following terms:-

Scienoe....... The knowledge of things, whether Ideal or Substantial.
Art . ......... The modification of Substantial thinge by our Substantial Power.
Literature.... The modification of Ideal things by our Ideal Power.
4. But now observe. If this division be a just one, we ought to have a word for literature, with the 'Letter' left out of it. It is true that, for the most part, the modification of ideal things by our ideal power is not complete till it is expressed; nor even to ourselves delightful, till it is communicated. To letter it and label it-to inscribe and to word it rightly,-this is a great task, and it is the part of literature which can be most distinctly taught. But it
is only the formation of its body, And the soul of it can exist without the body; but not at all the body without the soul; for that is true no less of literature than of all else in us or of us-" litera occidit, spiritus autem vivificat."

Nevertheless, I must be content to-day with our old word. We cannot say 'spiriture' nor 'animature,' in stead of literature; but you must not be content with tho vulgar interpretation of the word. Renember always that you come to this University,-or, at least, your fathers came,-not to learn how to say things, but how to think them.
5. "How to think them! but that is only the art of logic," you perhaps would answer. No, again, not at all: logic is a method, not a power; and we have defined literature' to be the modification of ideal things by ideal power, not by mechanical method. And you come to the University to get that power, or develope it; not to be taught the mere method of using it.

I say yon come to the University for this; and perhaps some of you are mach surprised to hear it! You did not know that you came to the University for any such purpose. Nay, perhaps you did not know that you had come to a University at all? Yon do not at this instant, some of your, I am well assured, know $n$ hat a University means. Does it mean, for instauce-can jou answer me in a moment, whether it means-a place where everybody comes to learn something; or a place where somebody connes to
learn everything? It means-or you are trying to make it mean-practically and at present, the first; but it means theoretically, and always, the last; a place where only certain persons come, to learn everything; that is to say, where those who wish to be able to think, come to learn to think : not to think of mathematics only, nor of morals, nor of surgery, nor chemistry, but of everything, rightly.
6. I say you do not all know this; and yet, whether you know.it or not,-whether you desire it or not,-to some extent the everlasting fitness of the matter makes the facts conform to it. For we have at present, observe, schools of three kinds, in operation over the whole of England. We have-I name it first, though, I am sorry to say, it is last in influence-the lody consisting of the Royal Academy, with the Institute of Architects, and the schools at Kensington, and their branches; teaching various styles of fine or mechanical art. We have, in the second place, the Royal Society, as a central body; and, as its satellites, separate companies of men devoted to each several science: investigating, classing, and describing facts with unwearied industry. And, lastly and chiefly, we have the great Universities, with all their subordinate public schools, distinctively occupied in regulating,-as I think you will at once admit,-not the language merely, nor even the language principally, but the modes of philosophical and imaginative thought in which we desire that youth shculd be disciplined, and age informed and majes. tic. The methods of langnage, and its range; the possi-
bilities of its beauty, and the necessities for its precision, are all dependent upon the range and dignity of the unspoken conceptions which it is the function of these great schools of literature to awaken, and to gnide.
7. The range and dignity of conceptions! Let us pause a minute or two at these words, and be sure we accept them.

First, what is a conception? What is this separate object of our work, as scholars, distinguished from artists, and from men of science?

We shall discover this better by taking a simple instance of the three agencies.

Suppose that you were actually on the plain of Pæstum, watching the drift of storm-clond which Turner has here engraved.* If you had occupied yourself chiefly in schools of science, you would think of the mode in which the electricity was collected; of the inflnence it had on the shape and motion of the cloud; of the force and duration of its flashes, and of other such material phenomena. If you were an artist, you would be considering how it might be possible, with the means at your disposal, to obtain the brilliancy of the light, or the depth of the gloom. Finally, if you were a scholar, as distinguished from either of these, you wonld be occupied with the imagination of the state of the temple in former times; and as you watched the thunder-clonds drift past its columns, and the power of the God of the heavens put

[^2]forth, as it seemed, in scorn of the departed power of the god who was thought by the heathen to shake the earththe utterance of your mind would become, whether in actual words or not, such as that of the Psalmist:"Clouds and darkness are round about Him-righteous. ness and judgment are the habitation of His throne." Your thoughts would take that shape, of their own accord, and if they fell also into the language, still your essential scholarship would consist, not in your remembering the verse, still less in your knowing that "judgment" was a Latin word, and "throne" a Greek one; but in your having power enough of conception, and elevation enough of character, to understand the nature of justice, and be appalled before the majesty of dominion.
8. You come, therefore, to this University, I repeat once again, that you may learn how to form conceptions of proper range or grasp, and proper dignity, or worthiness. Keeping then the ideas of a separate school of art, and separate school of science, what have yon to learn in these? You would learn in the school of art, the due range and dignity of deeds; or doings-(I prefer the word. to "makings," as more general); and in the school of science, you would have to learn the range and dignity of knowledges.

Now be quite clear about this: be sure whether you really agree with me or not.

You come to the School of Literature, I say, to learn the range and dignity of conceptions.

To the School of Art, to learn the range and dignity of Deeds.

To the School of Science to learn the range and dignity of Knowledges.

Do you agree to that, or not? I will assume that you admit my triple division; but do you think, in opposition to me, that a school of science is still a school of science, whatever sort of knowledge it teaches; and a school of art still a school of art, whatever sort of deed it teaches; and a school of literature still a school of literature, whatever sort of notion it teaches?

Do jou think that? for observe, my statement denies that. My statement is, that a school of literature teaches you to have one sort of conception, not another sort; a school of art to do a particular sort of deed, not another sort; a school of science to possess a particular sort of knowledge, not another sort.
9. I assume that you differ with me on this point;-some of you certainly will. Well then, let me gc back a step. You will all go thus far with me, that -now taking the Greek words-the school of literature teaches you to have voûs, or conception of things, instead of äpoua,-no conception of things; that the school of art teaches you Té $\chi^{\nu \eta}$ of things, instead of $\dot{a} \tau \epsilon \chi \chi^{\prime i a}$; and the school of scienco, émıбт $\eta \dot{\prime} \mu$, instead of äyvoia or 'ignorantia.' But, you recollect, Aristotle names two other faculties with these three,- $\phi \rho o ́ v \eta \sigma t s$, namely, and roфía. He has altogether five, тє́ $\chi^{\nu \eta} \eta_{\text {, }}$
 plest English,-art, science, sense, wisdom, and wit. We have got our art, science, and wit, set over their three domains; and we old people send you young ones to those three schools, that you may not remain artless, scienceless, nor witless. But how of the sense, and the wisdom? What domains belong to these? Do you think our trefoil division should become cinquefoil, and that we ought to have two additional schools; one of Philosophia, and one of Philophronesia? If Aristotle's division were right it would be so. But his division is wrong, and he presently shows it is; for he tells you in the next page, (in the sentence I have so often quoted to you, ) that "the virtue of art is the wisdom which consists in the wit of what is honourable." Now that is perfectly true; bit it of course vitiates his division altogether. He divides his entire subject into $A, B, C, D$, and $E$; and then he tells you that the virtue of $A$ is the $B$ which consists in $C$. Now you will continually find, in this way, that Aristotle's assertions are right, but his divisions illogical. It is quite true that the virtue of art is the wisdom which consists in the wit of what is honourable; but also the virtue of science is the wit of what is honourable, and in the same sense, the virtue of $\nu o u ̂ s$, or wit itself, consists in its being the wit or conception of what is honourable. Soфia, therefore, is not only the à $\rho \epsilon \tau \eta^{\prime} \tau \in ́ \chi \chi \eta$, but, in exactly the same sense, the $\dot{a} \rho \in \tau \dot{\eta} \dot{\epsilon} \pi \iota \sigma \tau \dot{\eta} \mu \eta s$, and in the same sense, it is the $\dot{\alpha} \rho \epsilon \tau \eta \eta^{\prime} \nu o o^{\prime} v$. And if not governed by
oopia, each school will teach the vicious condition of ite owin special faculty. As roфía is the ápeт $\dot{\eta}$ of all three, so $\mu \omega \rho$ ía will be the какía of all three.
10. Now in this, whether you agree with me or not, let me be at least sure you understand me. $\Sigma$ opla, I say, is the virtue, $\mu \omega \rho l a$ is the vice, of all the three faculties of art, science, and literature. There is for each of them a negative and a positive side, as well as a zero. There is nescience for zero in science-with wise science on one side, foolish science on the other: $\dot{a} \tau \epsilon \chi \nu l a$ for zero in art, with wise art on one side, foolish art on the other; and ävoua for zero in $\nu 0 \hat{\jmath}$, with wise $\nu o u ̂ s$ on one side, foolish voûs on the other.
11. You will smile at that last expression, 'foolish voûs.' Yet it is, of all foolish things, the commonest and deadliest. We continually complain of men, much more of women, for reasoning ill. But it does not matter how they reason, if they don't conceive basely. Not one person in a hundred is capable of seriously reasoning; the difference between man and man is in the quickness and quality, the accipitrine intensity, the olfactory choice, of his voûs. Does he hawk at game or carrion? What you choose to grasp with your mind is the question ;-not how you handle it afterwards. What does it matter how you build, if yon have bad bricks to build with; or how you reason, if every idea with which you begin is foul or false. And in general all fatal false reasoning proceeds from people's having some
one false notion in their hearts, with which they are resolved that their reasoning shall eomply.

But, for better illustration, I will now take my own special subject out of the three;一白 $\chi \boldsymbol{\eta} \eta$. I have said that we have, for its zero, ä ácरula, or artlessness-in Latin, 'inertia,' opposed to ' ars.' Well, then, we have, from that zero, wise art on the one side, foolish art on the other; and the finer the art, the more it is capable of this living increase, or deadly defect. I will take, for example, first, a very simple art, then-a finer one; but both of them arts with which most of you are thoroughly aequainted.
12. One of the simplest pieces of perfect art, which you are yourselves in the habit of practising, is the stroke of an oar given in true time. We have defined art to be the wise modification of matter by the body (substantial things by substantial power, $\widehat{8} 3$ ). With a good oarstroke you displace a certain quantity of water in a wise way. Supposing you missed your stroke, and caught a crab, you would displace a certain quantity of water in a foolish way, not only ineffectually, but in a way the reverse of what you intended. The perfectness of the stroke implies not only absolutely accurate knowledge or science of the mode in which water resists the blade of an oar, but the having in past time met that resistance repeatedly with greater and greater rightness of adaptation to the end proposed. That end being perfectly simple,- the advance of the boat as far as possible with a
given expenditure of strength, you at once recognize the degree in which the art falls short of, or the artlessness negatives your purpose. But your being ' $\sigma o \phi{ }^{\prime}{ }^{\prime}$;' as an oarsman, implies much more than this mere art founded on pure science. The fact of your being able to row in a beautiful manner depends on other things than the knowledge of the force of water, or the repeated practice of certain actions in resistance to it. It implies the practice of those actions under a resolved discipline of the body, involving regulation of the passions. It signifies submission to the authority, and amicable concurrence with the humours of other persons; and so far as it is beautifully done at last, absolutely signifies therefore a moral and intellectual rightness, to the necessary extent influencing the character honourably and graciously. This is the sophia, or wit, of what is most honourable, which is concerned in rowing, withont which it must become no rowing, or the reverse of rowing.
13. Let us next take example in an art which perliaps you will think (though I hope not) much inferior to rowing, but which is in reality a much higher art-dancing. I have just told you ( $\$ 11$ ) how to test the rank of artsnamcly, by their corruptibility, as you judge of the fineness of organic substance. The moria,* or folly, of

[^3]rowing, is only ridiculous, but the moria, or folly, of dancing, is much worse than ridiculous; and, therefore you may know that its sophia, or wisdom, will be much more beantiful than the wisdom of rowing. Suppose, for instance, a minuet danced by two lovers, both highly bred, both of noble character, and very much in love with each other. You would see, in that, an art of the most highly-finished kind, under the government of a sophia which dealt with the strongest passions, and most exquisite perceptions of beauty, possible to humanity.
14. For example of the contrary of these, in the same art, I cannot give you one more definite than that which I saw at, I think, the Gaiety Theatre--but it might have been at any London theatre now,-two years ago.

The supposed scene of the dance was Hell, which was painted in the background with its flames. The dancers were supposed to be demons, and wore black masks, with red tinsel for fiery eyes; the same red light was represented as coming out of their ears also. They began their dance by ascending through the stage on spring trapdoors, which threw them at once ten feet into the air; and its performance consisted in the expression of every kind of evil passion, in frantic excess.
15. You will not, I imagine, be at a loss to understand the sense in which the words sophia and moria are to be rightly used of these two methods of the same art. But those of you who are in the habit of accurate thinking will at once perceive that I have introduced a new
element into my subject by taking an instance in a higher art. The folly of rowing consisted mainly in not being able to row ; but this folly of dancing does not consist in not being able to dance, but in dancing well with evil purpose; and the better the dancing, the worse the result.

And now I am afraid I must tease yon by asking your attention to what you may at first think a vain nicety in analysis, but the nicety is here essential, and I hope throughout this course of Lectures, not to be so troublesome to you again.
16. The mere negation of the power of art-the zero of it-you say, in rowing, is ridiculous. It is, of course, not less ridiculous in dancing. But what do you mean by ridiculous? You mean contemptible, so as to provoke laughter. The contempt, in either case, is slight, in ordinary society; becanse, though a man may neither know how to row, or dance, he may know many other things. But suppose he lived where he could not know many other things? By a stormy sea-coast, where there could be no fresco-painting, in a poor country, where could be none of the fine arts connected with wealth, and in a simple, and primitive society, not yet reached by refinements of literature; but where good rowing was necessary for the support of life, and good dancing, one of the most vivid aids to domestic pleasure. You would then say that inability to row, or to dance, was far worse than ridiculous; that it marked a man for a good-for
nothing fellow, to be regarded with indignation, as well as contempt.

Now, remember, the inertia or zero of art always involves this kind of crime, or at least, pitiableness. The want of opportunity of learning takes away the moral guilt of artlessness; but the want of opportunity of learning such arts as are becoming in given circumstances, may indeed be no crime in an individual, but cannot be alleged in its defence by a nation. National ignorance of decent art is always criminal, unless in earliest conditions of society; and then it is brutal.
17. To that extent, therefore, culpably or otherwise, a kind of moria, or folly, is always indicated by the zero of art-power. But the true folly, or assuredly culpable folly, is in the exertion of our art-power in an evil direction. And here we need the finesse of distinction, which I am afraid will be provoking to you. Observe, first, and simply, that the possession of any art-power at all implies a sophia of some kind. These demon dancers, of whom I have just spoken, were earning their bread by severe and honest labour. The skill they possessed could not have been acquired but by great patience and resolute selfdenial ; and the very power with which they were able to express, with precision, states of evil passion, indicated that they had been brought up in a society which, in some measure, knew evil from good, and which had, therefore, some measure of good in the midst of it. Nay, the farther probability is, that if you inquired into the life of
these men, you would find that this demon dance had been invented by some one of them with a great imaginative power, and was performed by them not at all in preference of evil, but to meet the demand of a public whose admiration was capable of being excited only by violence of gesture, and vice of emotion.
18. In all cases, therefore, observe, where the opportunity of learning has been given; the existence of the art-power indicates sophia, and its absence indicates moria. That great fact I endeavoured to express to you, two years since, in my third introductory Lecture. In the present course I have to show you the action of the final, or higher sophia which directs the skill of art to the best purposes; and of the final, or lower moria which misdirects them to the worst. And the two points I shall endeavour to bring before you thronghout will be these:-First, that the object of University teaching is to form your conceptions;-not to acquaint you with arts, nor sciences. It is to give you a notion of what is meant by smith's work ; for instance--but not to make yon blacksmiths. It is to give you a notion of what is meant' by medicine, but not to make you physicians. The proper academy for blacksmiths is a blacksmith's forge; the proper academy for physicians is an hospital. Here you are to be taken away from the forge, out of the hospital, out of all special and limited labour and thought, into the 'Universitas' of labour and thought, that you may in peace in leisure, in calm of disintcrested
contemplation be enabled to conceive rightly the laws of nature, and the destinies of Man.
19. Then the second thing I have to show you is that over these three kingdoms of imagination, art, and science, there reigns a virtne or faculty, which from all time, and by all great people, has been recognized as the appointed ruler and guide of every method of labour, or passion of soul; and the most glorious recompense of the toil, and crown of the ambition of man. "She is more precions than rubies, and all the things thou canst desire are not to be compared unto her. Lay fast hold upon her; let her not go; keep her, for she is thy life."

Are not these, and the innumerable words like to these, which you remember as I read them, strange words if Aristotle's statement respecting wisdom be true; that it never contemplates anything that can make men
 $a ̈ ้ \nu \rho \omega \pi o s . "$

When we next meet, therefore, I purpose to examine what it is which wisdom, by preference, contemplates; what choice she makes among the thoughts and sciences open to her, and to what purpose she employs whatever science she may possess.

And I will briefly tell you, beforehand, that the result of the inquiry will be, that instead of regarding none of the sources of happiness, she regards nothing else; that she measures all worthiness by pure felicity; that we are permitted to conceive her as the cause even of gladness tc

God-"I was daily His delight, rejoicing always before Him,"-and that we are commanded to know her as queen of the populous world, "rejoicing in the habitable parts of the Earth, and whose delights are with the sons of Men."

## LECTURE II.

## OF WISDOM AND FOLLY IN SCIENCE.

## 10th February, 1872

20. In iny last lecture I asserted the positive and negative powers of literature, art, and science; and endeavoured to show you some of the relations of wise art to foolish art. To-day we are to examine the nature of these positive and negative powers in science; it being the object of every true schooil to teach the positive or constructive power, and by all means to discourage, reprove, and extinguish the negative power.

It is very possible that you may not often have thought of, or clearly defined to yourselves, this destructive or deadly character of some elements of science. You may indeed bave recognized with Pope that a little knowledge was dangerous, and you have therefore striven to drink deep; you may have recognized with Bacon, that knowledge might partially become venomous; and you may have sought, in modesty and sincerity, antidote to the inflating poison. But that there is a ruling spirit or oopia, under whose authority you are placed, to determino for you, first the choice, and then the use of all knowledge
whatsoever ; and that if yon do not appeal to that ruler, mnch more if you disobey her, all science becomes to you ruinous in proportion to its accumulation, and as a net tc your soul, fatal in proportion to the fineness of its thread, -this, I imagine, few of you, in the zeal of learning, have suspected, and fewor still have pressed their suspicion so far as to recognize or believe.
21. You most have nearly all heard of, many must have seen, the singular paintings; some also may have read the poems, of William Blake. The impression that his drawings once made is fast, and justly, fading away, though they are not withont noble merit. But his poems have much more than merit; they are written with absolnte sincerity, with infinite tenderncss, and, though in the manner of them diseased and wild, are in verity the words of a great and wise mind, disturbed, but not deceived, by its sickness; nay, partly exalted by it, and sometimes giving forth in fiery aphorison some of the most precions words of existing literature. One of these passages I will ask you to remember ; it will often be serviceable to you -

> "Doth the Eagle know what is in the pit, Or wilt thou go ask the Mole?"

It would be impossible to express to yon in briefer terms the great truth that there is a different kind of knowledge good for every different creature, and that the glory of the lugher creatures is in ignorance of what is known to the lower.
22. And, above all, this is true of man; for every other creature is compelled by its instinct to learn its own ap. pointed lesson, and must centralize its perception in its own being. But man has the choice of stooping in science beneath himself, and striving in science beyond himself; and the "Know thyself" is, for him, not a law to which he must in peace submit; but a precept which of all others is the most painful to understand, and the most difficult to fulfil. Most painful to understand, and hinmiliating; and this alike, whether it be held to refer to the knowledge beneath us, or above. For, singularly enough, men are always most conceited of the meanest science :-

> "Doth the Eagle know what is in the pit, Or wilt thou go ask the Mole?"

It it just those who grope with the mole and cling with the bat, who are vainest of their sight and of their wings.
23. "Know thyself;" but can it indeed be sophia,-can it be the noble wisdom, which thus speaks to science? Is not this rather, you will ask, the roice of the lower virtue of prudence, concerning itself with right conduct, whether for the interests of this world or of the future? Does not sophia regard all that is above and greater than man; and by so much as we are forbidden to bury ourselves in the mole's earth-heap, by so much also, are we not urged to raise ourselves towards the stars?

Indeed, it would at first seen so; nay, in the passage of the Ethics, which I proposed to you to-day for question, you
are distinetly told so. There are, it is said, many different kinds of phronesis, by which every animal recognizes what is for its own good: and man, like any other creatnre, has his own separate phronesis telling him what he is to seek, and to do, for the preservation of his life: but above all these forms of prudence, the Greek sage tells you, is the sophia of which the objects are unchangeable and eterual, the methods consistent, and the conclusions universal: and this wisdom has no regard whatever to the things in which the happiness of man consists, but ac quaints itself only with the things that are most honourable; so that "we call Anaxagoras and Thales, and snch others, wise indeed, but not prudent, in that they know nothing of what is for their own advantage, but know surpassing things, marvellous things, difficult things, and divine things."
24. Now here is a question which evidently touches us closely. We profess at this day to be an especially prudent nation ;-to regard only the things which are for our own advantage; to leave to other races the knowledge of surpassing things, marvellons things, divine things, or beautiful things; and in our exceding prudence we are at this moment, refusing the purchase of, perhaps, the most interesting picture by Raphael in the world, and, eertainly, one of the most beantifnl works ever produced by the art-wisdom of man, for five-and-twenty thousand pounds, while we are debating whether we shall not pay three hundred millious to the Americans, as a fine for
selling a small frigate to Captain Semmes. Let me reduce these sums from thousands of pounds, to single pounds; you will then see the facts more clearly; (there is not one person in a million who knows what a "million" means; and that is one reason the nation is always ready to let its ministers spend a million or two in cannon, if they can show they have saved twopence-halfpenny in tape). These are the facts then, stating pounds for thousands of pounds; you are offered a Nativity, by Raphacl, for five-and-twenty pounds, and cannot afford it; but it is thought you may be bullied into paying three hundred thousand pounds, for having sold a ship to Captain Semmes. I do not say you will pay it. Still your present position is one of deprecation and humility, and that is the kind of result which you bring abont by actiug with what you call "practical common sense," instead of Divine wisdom.
25. Perhaps you think I am losing Aristotle's notion of common sense, by confusing it with our vulgar English one; and that selling ships or ammunition to people whom we have not courage to fight either for or against, would not by Aristotle have been held a phronetic, or prudent proceeding. Be it so; let us be certain then, if we can, what Aristotle does mean. Take the instance I gave you in the last lecture, of the varions modes of feeling in which a master of literature, of science, and of art, would severally regard the storm round the temples of Pæstum.

The man of science, we said, thought of the origin of the electricity; the artist of its light in the clonds, and the scholar, of its relation to the power of Zeus and Poseidon, There you have Episteme; Techne, and Nous; well, now what does Phronesis do?

Phronesis puts up his umbrella, and goes home as fast as he can. Aristotle's Phronesis at least does; having no regard for marvellous things. But are you sure that Aristotle's Phronesis is indeed the right sort of Phronesis? May there not be a commonsense, as well as an art, and a science, under the command of sophia? Let us take an instance of a more subtle kind.
26. Suppose that two young ladies, (I assume in my present leetures, that none are present, and that we may say among ourselves what we like; and we do like, do we not, to snppose that young ladies excel us only in prudence, and not in wisdom ?) let us suppose that two young ladies go to the observatory on a winter night, and that one is so anxious to look at the stars that she does not care whether she gives herself cold, or not; but the other is prudent, and takes care, and looks at the stars only as long as she can without eatching cold. In Aristotle's mind the first young lady would properly deserve the name of Sophia and the other that of Prudence. But in order to judge them fairly, we must assume that they are acting under exactly the same conditions. Assume that they both equally desire to look at the stars; then, the fact that one of them stops when it would be dangerous
to look longer, does not show that she is less wise,-less interested, that is to say, in surpassing and marvellous things;-but it shows that she has more self-command, and is able therefore to remember what the other does not think of. She is equally wise, and more sensible. But suppose that the two girls are originally different in disposition; and that the one, having much more imagination than the other, is more interested in these surpassing and marvellous things; so that the self-command, which is enough to stop the other, who cares little for the stars, is not enough to stop her, who cares much for them;-you would say, then, that, both the girls being equally sensible, the one that canght cold was the wisest.
27. Let us make a farther supposition. Returning to our first condition, that both the girls desire equally to look at the stars; let us put it now that both have equal self-command, and wonld therefore, supposing no other motives were in their minds, together go on star-gazing, or together stop star-gazing; but that one of them has greater consideration for her friends than the other, and though she would not mind catching cold for her own part, would mind it much for fear of giving her mother trouble. She will leave the stars first, therefore; but should we be right now in saying that she was only more sensible than her companion, and not more wise? This respect for the feelings of others, this understanding of her duty towards others, is a much higher thing than the love of stars. It is an imaginative knowledge,
not of balls of fire or differences of space; but of the feelings of living creatures, and of the forces of duty by which they justly move. This is a knowledge, or perception, therefore, of a thing more surpassing and marvellous than the stars themselves, and the grrasp of it is reached by a higher sophia.
23. Will you have patience with me for one supposition more? We may assume the attraction of the specta. cle of the heavens to be equal in degree, and yet, in the minds of the two girls, it may be entirely different in kind. Supposing the oue versed somewhat in abstract Science, and more or less acquainted with the laws by which what she now sees may be explained; she will probably take interest chiefly in questions of distance and magnitude, in varieties of orbit, and proportions of light. Supposing the other not versed in any science of this kind, but acquainted with the traditions attached by the religion of dead nations to the figures they discerned in the sky: she will care little for arithmetical or geometrical matters, but will probably receive a much deeper emotion, from witnessing in clearness what has been the amazement of so many eyes long closed; and recognizing the same lights, through the same darkness, with innocent shepherds and husbandmen, who knew only the risings and settings of the immeasurable vault, as its lights shone on their own fields or mountains; yet saw true miracle in them, thankful that none but the Supreme Ruler could bind the sweet influences of Pleiades, or
loose the bands of Orion. I need not surely tell you, that in this exertion of the intellect and the heart, there would be a far nobler sophia than any concerned with the analysis of matter, or the measurement of space.
29. I will not weary you longer with questions, but simply tell you, what yon will find ultimately to be true, that sophia is the form of thought, which makes common seuse unselfish,-knowledge unselfish,-art unselfish,-and wit and imagination mnselfish. Of all these, by themselves, it is true that they are partly venomous; that, as knowledge puffetl up, so does pradence-so does artso does wit; but, added to all these, wisdom, or (you may read it as an equivalent word), added to all thesecharity, edifieth.
30. Note the word; builds forward, or builds up, and builds securely because on modest and measured foundation, wide, though low, and in the natural and living rock.

Sophia is the faculty whieh recognizes in all things their bearing upon life, in the entire sum of life that we know, bestial and limman; but which, understanding the appointed objects of that life, concentrates its interest and its power on Humanity, as opposed on the one side to the Arimalism which it unst rule, and distinguished on the other side from the Divinity which rules it, and which it camot imagine.

It is as little the part of a wise man to reflect much out the nature of beings above him, as of heings beneath him

It is inmodest to smppose that he can conceive the one, and legrading to suppose that he should be busied with the other. To recognize his everlasting inferiority, and his everlasting greatness; to know himself, and his place; to be content to submit to God without understanding Hin; and to rule the lower creation with sympathy and kindness, yet neither sharing the passion of the wild beast, nor imitating the seience of the Insect;-this you will find is to be modest towards God, gentle to His creatures, and wise for himself.
31. I think you will now be able to fasten in your minds, first the idea of unselfishness, and secondly, that of modesty, as component elements of sophia; and having obtained thus much, we will at once make use of our gain, by rendering more clear onc or two points respecting its action on art, that we may then see more surely its obscurer function in science.

It is absolutely unselfish, we say, not in the sense of being without desire, or effort to gratify that desire; on the contrary, it longs intensely to sec, or know the things it is rightly interested in. But it is not interested specially in itself. In the degree of his wisdom, an artist is unconcerned about his work as his own;-coneerned about it only in the degree in which he would be, if it were auother man's-recognizing its precise value, or no value, from that outer stand-point. I do not think, unless fou examine your minds very attentively, that you can have any conception of the difficulty of doing this.

Absolutely to do it is impossible, for we are all inteuded by nature to be a little unwise, and to derive more pleasure, therefore, from our own success than that of others. But the intense degree of the difference is usnally unmeasured by us. In preparing the drawings for you to use as copies in these schools, my assistant and I are often sitting beside each other; and he is at work, usually, on the nore important drawing of the two. I so far recognize that greater importance, when it exists, that if I had the power of determining which of as should succeed, and which fail, I should be wise enough to choose his success rather than my own. But the actual effect on my own mind, and comfort, is very different in the two cases. If he fails, I am sorry, but not mortified; -on the contrary, perhape a little pleased. I tell him, indulgently, 'he will do better another time,' and go down with great contentment to my lunch. But, if $I$ fail, though I would rather, for the sake of the two drawings, have had it so, the effect on my temper is very different. I say, philosophically, that it was better so-but I can't eat any lunch.
32. Now, just imagine what this inherently selfish pas-sion-muconquerable as you will find it by the most deliberate and maintained efforts-fancy what it becomes, when, instead of striving to subdue, we take every means in our power to increase and encourage it; and when all the circumstances around us concur in the deadly cultivation. In all base schools of Art, the craftsman is depend
ent for his bread on originality; that is to say, on finding in himself some fragment of isolated faculty, by which his work may be recognized as distinet from that of other men. We are ready enough to take delight in our little doings, without any such stimulns;-what must be the effect of the popular applanse which continually suggests that the little thing we ean separately do is as excellent as it is singular! and what the effect of the bribe, held ont to us through the whole of life, to produce,-it being also at our"peril not to produce-something different from the work of our neighbors? In all great schools of art these conditions are exactly reversed. An artist is praised in these, not for what is different in him from others, nor for solitary performance of singular work; but ouly for doing most strongly what all are endeavoring; and for eontributing, in the ineasure of his strengtli, to some great aehievement, to be eompleted by the mity of multitudes, and the sequenee of ages.
33. And now, passing from art to science, the unselfishness of sophia is shown by the value it therein attaches to every part of knowledge, new or old, in proportion to its real utility to mankind, or largeness of range in creation. The selfishness which renders sophia impossible, and enlarges the elastic and vaporons kingdom of folly, is shown by our caring for knowledge only so far as we have been concerned in its discovery, or are ourselves skilled and admired in its communication. If there is an art which "puffeth up," even when we are sulurounded ly magnifi
cence of achievement of past ages, confessedly not by uè to be rivalled, how much more must there be a science which puffeth up, when, by the very condition of science, it must be an advance on the attainments of former time, and however slight, or however slow, is still always, as the leaf of a pleasant spring compared to the dried branches of years gone by? And, for the double calamity of the age in which we live, it has chanced that the demand of the vulgar and the dull for originality in Art, is associated with the demand of a sensual economy for originality in science; and the praise w ich is too readily given always to discoveries that are new, is enhanced by the reward which rapidity of commonication now ensures to discoveries that are profitable. What marvel if future time shall reproach us with having destroyed the labours, and betrayed the knowledge of the greatest nations and the wisest men, while we amused ourselves with fantasy in art, and with theory in science: happy, if the one was idle without being vicions, and the other mistaken without being mischievous. Nay, truth, and snccess, are often to ns more deadly than error. Perhaps no progress more trinmphant has been made in any science than that of Chemistry; but the practical fact which will remain for the contemplation of the future, is that we have lost the art of painting on glass, and invented gun-cotton and nitro-glycerine. "Can you imagine," the future will say, "those English fools of the nineteenth century, who went about putting up memorials of themselves in glass which
they could not paint, and blowing their women and children to pieces with cartridges they would not fight with?"
34. You may well think, gentlemen, that I am unjust and prejudiced in such sayings;-you may imagine that when all our mischievons inventions have done their worst, and the wars they provoked by cowardice have been forgotten in dishonour, our great investigators will be rememhered, as men who laid first the foundations of fruitful knowledge, and vindicated the majesty of inviolable law. No, gentlemen; it will not be so. In a little while, the discoveries of which we are now so prond will be familiar to all. The marvel of the future will not be that we should have discerned them, but that our predecessors were blind to them. We may be envied, but shall not be praised, for having been allowed first to perceive and proclaim what could be concealed no longer. But the misuse we made of our discoveries will be remembered against us, in eternal history ; our ingennity in the vindication, or the denial, of species, will be disregarded in the face of the fact that we destroyed, in civilized Europe, every rare bird and secluded flower; our chemistry of agriculture will be taunted with the memories of irremediable famine; and our mechanical contrivance will only make the age of the mitrailleuse more abhorred than that of the guillotine.
35. Yes, believe me, in spite of our political liberality, and poetical philanthropy; in spite of our almshouses, $\underset{2^{*}}{\text { hospitals, }}$ and Sunday-schools; in spite of our missionary
endeavours to preach abroad what we cannot get believed at home; and in spite of our wars against slavery, indemnified by the presentation of ingenious bills,-we shall be remembered in bistory as the most cruel, and therefore the most unwise, generation of men that ever yet tronbled the earth:--the most cruel in proportion to their sensibili-ty,-the most unwise in proportion to their science. No people, understanding pain, ever inflicted so much: no people, understanding facts, ever acted on them so little. You execrate the name of Eccelin of Padua, becanse he slew two thousand imocent persons to maintain his power; anid Dante eries out against Pisa that she should be sunk in the sea, because, in revenge for treachery, she put to death, by the slow pangs of starvation, not the traitor only, but his children. But we men of London, we of the modern Pisa, slew, a little while since, five hundred thonsand men instead of two thousand-(I speak in official terms, and know my numbers)-these we slew, all gniltless; and these we slew, not for defence, nor for revenge, but most literally in cold blood; and these we slew, fathers and children together, by slow starvation-simply becanse, while we contentedly kill our own children in competition for places in the Civil Service, we never ask: when once they have got the places, whether the Civil Service is done.
36. That was our missionary work in Orissa, some three or four years ago;-our Christian miracle of the five loaves, assisted as we are in its performance, by stean-
engines for the threshing of the corn, and by railroads for carrying it, and by proposals from English noblemen to cut down all the trees in England, for better growing it. That, I repeat, is what we did, a year or two ago; what are we doing now? Have any of you chanced to hear of the famine in Persia? Here, with due science, we arrange the roses in our botanic garden, thoughtless of the country of the rose. With due art of horticulture, we prepare for our harvest of peaches;-it might perhaps seriously alarm ns to hear, next autumn, of a coming famine of peaches. But the famine of all things, in the country of the peach -do you know of it, eare for it:-quaint famine that it is, in the fruitfullest, fairest, richest of the estates of earth; from which the Magi brought their treasures to the feet of Christ?

How much of your time, scientific faeulty, popular literature, have been given, since this year began, to ascertain what Eugland can do for the great countries under her command, or for the nations that look to her for help; and how much to discuss the chances of a single impostor's getting a few thousands a year?

Gentlemen, if your literature, popular and other; or your art, popular and other; or your science, popular and other, is to be eagle-eyed, remember that question I to-day solemnly put to yon-will you hawk at game or cairion? Shall it be only said of the thoughts of the heart of Eng-and-"Wheresoever the carcase is, thither shall the eagles be gathered together?"

## LECTURE III.

## the relation of wise art to wise science.

## " The morrow after St. Valentine's," 1872.

37. Our task to-day is to examine the relation between art and science, each governed by sophia, and becoming capable, therefore, of consistent and definable relation to each other. Between foolish art and foolish science, there may indeed be all manner of reciprocal mischievous influence; but between wise art and wise science there is essential relation, for each other's help and dignity.

You observe, I hope, that I always use the term 'science,' merely as the equivalent of 'knowledge.' I take the Latin word, rather than the English, to mark that it is knowledge of constant things, not merely of passing events: but yon had better lose even that distinction, and receive the word "scientia" as merely the equiralent of our English "knowledge," than fall into the opposito error of supposing that science means systematization or discovery. It is not the arrangement of new systems, nor the discovery of new facts, which constitute a man of science; but the submission to an eternal system; and the proper grasp of facts already known.
38. And, at first, to-day, I nse the wcrd "art" only of that in which it is my special office to instruct you; graphic imitation ; or, as it is commonly called, Fine art. Of course, the arts of construction,-building, carpentering, and the like, are directly dependent on many sciences, but in a manner which needs no discussion, so that we may put that part of the business out of our way. I mean by art, to-day, ouly imitative art ; and by science, to-day, not the knowledge of general laws, but of existent facts. I do not mean by science, for instauce, the knowledge that triangles with equal bases and between parallels, are equal, but the knowledge that the stars in Cassiopeia are in the form of a W.
Now, accepting the terms 'science' and 'art' under these limitations, wise art is only the reflex or shadow of wise science. Whatever it is really desirable and honourable to know, it is also desirable and honourable to know as completely and as long as possible; therefore, to present, or re-present, in the most constant manuer; and to bring again and again, not only within the thoughts, but before the eyes; describing it, not with vague words, but distinct lines, and trine colours, so as to approach always as nearly as may be to the likeness of the thing itself.
39. Can anything be more simple, more evidently or indisputably natural and right, than such connection of the two powers? That you should desire to know what you ought; what is worthy of your natnre, and help.
ful to your life: to know that;-nothing less,-nothing more; and to keep record and definition of such knowledge near yon, in the most vivid and explanatorf form?

Nothing, surely, can be more simple than this; yet the sum of art judgment and of art practice is in this. You are to recognize, or know, beautiful and noble thingsnotable, notabilia, or nobilia; and then You are to give the best possible account of them you ears, either for the sake of others, or for the sake of your exwn fronetful or apathetic self, in the future.
Now as I gave you and asked you" to remember without failing, an aphorism which embraced the liw of wise knowledge, so, to-day, I will ask yon to remember, without fail, one, which absolutely defines the relation of wise art to it. I have, already, quoted our to-day's aphorism to you, at the end of my 4th lecture on sealptare. Read the few sentences at the end of that lecture now, down to
" tile best, in' this kind, are bet smidows."
That is Slakspeare's judgment of his own art. And by strange coincidence, he has put the words into the mouth of the hero whose shadow or semblance in marble, is adnittedly the most ideal and heroic we possess, of man; yet, I need not ask you, whether of the two, if it were granted yon to see the statne by Phidias, or the hero Theseus himself, you would chouse rather to see the
carved stone, or the living King. Do you recollect how Shakspeare's Thesens concludes his sentence, spoken of the poor tradesmen's kindly offered art, in the Midsum. mer Night's Drean?
"The best in this kind are but shadows; and the worst are no worse, if imagination amend them."

It will not burden your memories painfully, I hope, thongh it may not advance you materially in the class list, if you will learn this entire sentence by heart, being, as it is, a faultless and complete epitome of the laws of mimetic art.
40. "But Shadows!" Make them as beautiful as you can; use them only to enable you to remember and love what they are cast by. If ever you prefer the skill of them to the simplicity of the truth, or the pleasure of them to the power of the truth, you have fallen into that vice of folly, (whether you call her какia or $\mu \omega \rho i a$, which concludes the subtle description of her given by Prodicns,
 à $\pi \circ \beta \lambda \epsilon$ '́ $\pi \epsilon \iota \nu-$ to look with love, and exclusive wonder, at her own shadow.
41. There is nothing that I tell you with more eager desire that you should .believe-nothing with wider ground in my experience for requiring you to believe, than this, that you never will love art well, till you love what sle mirrors better.
It is the widest, as the clearest experience $I$ have tc give you; for the beginning of all my own right art work
in life, (and it may not be unprofitable that I should tell yon this), depended, not on my love of art, but of mountains and sca. All boys with any good in them are fond of boats, and of course I liked the mountains best when they had lakes at the bottom; and I used to walk always in the middle of the loosest gravel I could find in the roads of the midland counties, that I might hear, as I trod on it, something like the sound of the pebbles on sear beach. No chance occurred for some time to develope what gift of drawing I had ; but I wonld pass entire days in rambling on the Cumberland hill-sides, or staring at the lines of surf on a low sand; and when I was taken annually to the Water-colour Exhibition, I used to get hold of a catalogue before-hand, mark all the Robsons; which I knew would be of purple mountains, and all the Copley Fieldings, which I knew would be of lakes or sea; and then go deliberately round the room to these, for the sake, observe, not of the pictures, in any wise, but ouly of the things painted.

And throngh the whole of following life, whatever power of judgment I have obtained, in art, which I am now confident and happy in using, or communicating, has depended on my steady habit of always looking for the subject principally, and for the art, only as the means of expressing it.
42. At first, as in youth one is almost sure to be, I wab led too far by my certainty of the rightness of this principle: and provoked into its exclusive assertion by the
pertinacity with which other writers denied it: so that, in tie first volume of Modern Painters, several passages occurred setting the subject or motive of the picture so much above the mode of its expression, that some of my more feebly gifted disciples supposed they were fulfilling my wishes by choosing exactly the subjects for painting which they were least able to paint. But the principle itself, I maintain, now in advanced life, with more reverence and firmness than in earliest youth: and though I believe that among the teachers who have opposed its assertion, there are few who enjoy the mere artifices of composition or dexterities of handling so much as I, the time which I have given to the investigation of these has only farther assured me that the pictures were noblest which compelled me to forget them.
43. Now, therefore, yon see that on this simple theory, you bave only to ask what will be the subjects of wise science; these also, will be, so far as they can be imitatively or suggestively represented, the subjects of wise art: and the wisdom of both the science and art will be recognized by their being lofty in their scope, but simple in their language; clear in fancy, but clearer in interpretation; severe in discernment, but delightful in display.
44. For example's sake, since we have just been listening to Shakspeare as a teacher of science and art, we will now examine him as a subject of science and art.

Suppose we have the existence and essence of Shakspeare to investigate, and give permanent account of; we
shall see that, as the scope and bearing of the science become nobler, art becomes more helpful to it; and at last, in its highest range, even necessary to it; hut still only as its minister.
We examine Shakspeare, first, with the science of chemistry, which informs us that Shakspeare consists of abont seventy-five parts in the hundred of water, some twelve or fifteen of nitrogen, and the rest, lime, phosphorus, and essential earthy salts.

We next examine him by the science of anatomy, which tells us (with other such matters,)' that Shakspeare has sever cervical, twelve dorsal, and five lumbar vertebre; that his forearm has a wide sphere of rotation; and that he differs from other animals of the ape species by being more delicately prehensile in the fingers, and less parfectly prehensile in the toes.

We next approach Shakspeare with the science of natural history, which tells us the colour of his eyes and hair, his habits of life, his temper, and his predilection for poaching.

There ends, as far as this subject is concerned, our possible science of substantial things. Then we take np our science of ideal things: first of passion, then of imaginar tion ; and we are told by these that Shakspeare is capable* of certain emotions, aud of mastering or commanding them: in certain modes. Finally, we take up our science of theology, and ascertain that he is in relation, or in supposed relation, with suck and such a Being, greater than himself.
45. Now, in all these successive stages of scientific description, we find art become powerful as an aid or record, in proportion to the importance of the inquiry. For chemistry, she can do scarcely anything: merely keep note of a colour, or of the form of a crystal. For anatomy, she can do somewhat more ; and for natural history, almost all things: while in recording passion; and affectionate intellect, she walks hand in hand with the highest science ; and to theology, can give nobler aid even than the verbal expression of literature.
46. And in considering this power of her's, remember that the theology of art has only of late been thought deserving of attention: Lord Lindsay, some thirty years ago, was the first to recognize its importance; and when I entered upon the study of the schools of Tuscany in 1845, his "Christian mythology" was the only guide I could trust. Even as late as 1860 , I had to vindicate the true position, in Christian science, of Luini, the despised pupil of Leonardo. But only assuming, what with general assent I might assume, that Raphael's dispute of the Sacrament-(or by its less frequently given, but true name--Raphacl's Theologia, ) is the most perfect effort yet made by art to illustrate divine science, I am prepared hereafter to show you that the most finished efforts of theologic literature, as compared with that piece of pictorial interpretation, have expressed less fully the condition of wise religions thought; and have been warped more dangeronsly into unwise religious speculation.
47. Upon these higher fields of inquiry we are not yet to enter. I shall endeavour for some time only to show you the function of modest art, as the handmaid of natural science; and the exponent, first of the beanty of the creatures subject to your own human life; and then of the history of that life in past time; of which one chief source of illustration is to be found in the most brilliant, and in its power on character, hitherto the most practically effective of the arts-Heraldry.

In natural history, I at first intended to begin with the lower types of life; but as the enlarged schools now give me the means of extending the use of our exaunples, we will at once, for the sake of more geueral service, take up ornithology, of the uses of which, in general culture, I have one or two grave words to say.
48. Perhaps you thought that in the beginning of my leeture to-day I too summarily dismissed the arts of construction and action. But it was not in disrespect to them ; and I must indeed ask you carefully to note one or two points respecting the arts of which an example is set us by birds ;-building, and singing.

The other day, as I was calling on the omithologist whose collection of birds is, I suppose, altogether urivalled in Europe,-(at once a monument of unwearied love of science, and an example, in its treatment, of the most delieate and patient art)-Mr. Gould-he showed me the nest of a common English bird; a nest which, notwithstanding his knowledge of the dexterous building of
birds in all the world, was not without interest even to him, and was altogether amazing and delightful to me. It was a bullfinch's nest, which had been set in the fork of a sapling tree, where it needed an extended foundation. And the bird had built this first story of her nest with withered stalks of clematis blossom; and with nothing else. These twigs it had interwoven lightly, leaving the branched heads all at the outside, producing an intricate Gothic boss of extreme grace and quaintness, apparently arranged both with triumphant pleasure in the art of basket-making, and with definite purpose of obtaining ornamental form.
49. I fear there is no occasion to tell you that the bird had no purpose of the kind. I say that I fear this, because I would much rather have to undeceive you in attributing too much intellect to the lower animals, than too little. But I suppose the only error which, in the present condition of natural history, you are likely to fall into, is that of supposing that a bullfinch is merely a mechanical arrangement of nervous fibre, covercd with feathers by a chronic cntaneous eruption; and impelled by a galvanic stimulus to the collection of clematis.
50. You wonld be in much greater, as well as in a more shameful, error, in supposing this, than if you attributed to the bullfinch the most deliberate rivalship with Mr. Street's prettiest Gothic designs. The bird has exactly the degree of emotion, the extent of science, and the command of art, which are neeessarv for its happiness: it had felt the cle-
matis twigs to be lighter and tougher than any others within its reach, and probably found the forked branches of them convenient for reticulation. In had naturally placed these outside, because it wanted a smooth surface for the bottom of its nest; and the beauty of the result was much more dependent on the blossoms than the bird.
51. Nevertheless, I am sure that if you had seen the nest,-much more, if you had stood beside the architect at work upon it,-you would have greatly desired to express your admiration to her ; and that if Wordsworth, or any other simple and kindly person, could even wish, for a little flower's sake,
> " That to this mountain daisy's self were known, The beauty of its star-shaped shadow, thrown On the smooth surface of this naked stone,"

mnch more fou would have yearned to inform the bright little nest-builder of your sympathy; and to explain to her, on art principles, what a pretty thing she was making.
52. Does it never occur to you, then, that to some of the best and wisest artists among ourselves, it may not be always possible to explain what pretty things they are making; and that, perhaps, the very perfection of their art is in their knowing so little about it?

Whether it has occurred to you or not, I assure you that it is so. The greatest artists, indeed, will condescend, oecasionally, to be scientific;-will labour, somewhat systematically, about what they are doing, as vulgar
persons do; and are privileged, also, to enjoy what they have made more than birds do; yet seldom, observe you, as being beantiful, but very much in the sort of feeling which we may fancy the bullfinch had also,-that the thing, whether pretty or ugly, could not have been better done; that they could not have made it otherwise, and are thankful it is no worse. And, assuredly, they have nothing like the delight in their own work which it gives to other people.
53. But putting the special simplieities of good artists out of question, let me ask you, in the second place, whether it is not possible that the same sort of simplicity might be desirable in the whole race of mankind; and that we ought all to be doing human work which would appear better done to creatures much above us, than it does to ourselves. Why should not our nests be as inter. esting things to angels, as bullfinches' are to us?

You will, probably, both smile at, and shrink from, such a supposition, as an insolent one. But to my thonght, it seems, on the contrary, the only modest one. That we should be able to admire the work of angels seems to me the impertinent idea; not, at all, that they should be able to admire ours.
54. Under existing circumstances, I confess the diffculty. It cannot be imagined that cither the back streets of our mannfacturing towns, or the designs of onr suburban villas, are things which the angels desire to look into: but it seems to me an inevitably logical conclusion that
if we are, indeed, the highest of the brute creation, we should, at least, possess as much unconscious art as the lower brutes; and build nests which shall be, for ourselves, entirely convenient; and may, perhaps, in the eyes of superior beings, appear more beautiful than to our own.
55. "Which shall be for ourselves, entirely conve. nient." Note the word;-becoming, decorous, harmonious, satisfyiug. We may not be able to build anything sublime; but, at all events, we should, like other flesh-invested creatures, be able to contrive what was decent, and it should be an human privilege to think that we may be admired in heaven for our contrivance. .

I have some difficulty in proceeding with what I want to say, because I know you must partly think I am jesting with you. I feel indeed some disposition to smile, myself; not because I jest, but in the sense of contrast letween what, logically, it seems, ought to be ; and what we must confess, not jestingly, to be the facts. How great also,-how quaint, the confusion of sentiment in our minds, as to this matter! We continually talk of honouring God with our buildings; and yet, we dare, not say, boldly, that, in His sight, we in the least expect to honour ourselves by them! And admitting, thongh I by no means feel disposed to admit, that here and there we may, at present, be honouring Hin by work that is worthy of the nature He gave us, in how many places, think you, are we offeuding Him by work that is disgraceful to it?
56. Let me return, yet for an instant, to my bird and her nest. If not actually complacent and exultant in her architecture, we may at least imagine that she, and her mate, and the choir they join with, cannot but be complacent and exultant in their song. I gave you, in a former lecture, the skylark as a type of mastership in music ; and remembering-some of you, I suppose, are not likely soon to forget,-the saint to whom yesterday was dedicated, let me read to you to-day some of the prettiest English words in which our natural feeling about such song is expressed.
> "And anone, as $I$ the day espide, No lenger would I in my bed abide, But unto a wood that was fast by, I went forth alone boldely, And held the way downe by a brook side,

> Till I came to a laund of white and green, So faire one had I never in been, The ground was green, ypoudred with daisie, The floures and the greves like hie, All greene and white, was nothing els seene.

> There sat I downe among the faire flours, And saw the birds trip out of hir bours, There as they rested hem all the night, They were so joyfull of the dayes light, They began of May for to done honours.

> They coud that service all by rote,
> There was many a lovely note, Some sang loud, as they had plained, And some in other manner voice yfained, And some all out with the full throte.

They proyned hem and made hem right gay, And daunceden and lepten on the spray, And evermore two and two in fere, Right so as they had chosen hem to yere In Feverere, upon saint Valentines day."

Yon recollect, perhaps, the dispute that follows between the cuckoo and the nightingale, and the promise which the sweet singer makes to Chaucer for rescuing her.
> " And then came the Nightingale to me And said Friend, forsooth I thanke thee That thou hast liked me to rescue, And one avow to Love make I now That all this May, I will thy singer be.

> I thanked her, and was right well apaied, Yea, quoth she, and be not thou dismaied, Tho' thon have heard the cuckoo erst than me; For, if I live, it shall amended be, The next May, if I be not affraied."

"If I be not affraied." Wonld she not put the "if" more timidly now, in making the same promise to any of yon, or in asking for the judgment between her and her enemy, which was to be past, do you remember, on this very day of the year, so many years ago, and within eight miles of this very spot?

> "And this shall he without any Nay On the morrow after St. Valentine's day, Under a maple that is faire and green Before the chamber window of the Queen At Woodstoke, upon the greene lawn.
> She thanked them, and then her leave took
> And into an hawthome by that broke.

## And there she sate, and sang upon that tree <br> ' Terme of life love hath withheld me' <br> So loud, that I with that sung awoke."

57. "Terme of life love hath withheld me!" Alas how have we men reversed this song of the nightingale so that our words must be "Terme of life, hatred hatl withheld me."

This, then, was the old English science of the song o: birds; and perhaps you are indignant with me for bring ing any word of it back to yon? Yon have, I doubt not your new science of song, as of nest-building: and I arr happy to think you conld all explain to me, or at leas you will be able to do so before you pass your natura science examination, how, by the accurate connection of a larynx with a bill, and by the action of heat, origi. nally derived from the sun, upon the muscular fibre, ar undulatory motion is produced in the larynx, and an open ing and slintting one in the bill, which is accompanied necessarily, by a piping sound.
58. I will not dispute your statement; still less do I wish to answer for the absolute truth of Chauccr's. You will find that the complete truth embraces great part of both ; and that you may study, at your choice, in any sing. ing bird, the action of universal heat on a marvellons mechanisin, or of individnal life, on a frame capable of exquisite passion. But the point I wish you to consider is the relation, to this lower creature's power, of your own human agencies in the production of sound, where you can best unite in its harmony.
59. I had occasion only the other day to wait for half an hour at the bottom of Ludgate Hill. Standing as much out of the way as I could, under the shadow of the railroad bridge, I watched the faces, all eager, many anxious, and some intensely gloomy, of the hurried passers by; and listened to the ceaseless crashing, whistling, and thundering sounds which mingled with the murmur of their steps and voices. And in the midst of the continuous roar, which differed only from that of the wildest sea in storm by its complexity and its discordance, I was wondering, if the sum of what all these people were doing, or trying to do, in the course of the day, conld be made manifest, what it would come to.
60. The sum of it would be, I suppose, that they had all contrived to live through the day in that exceedingly unpleasant manner, and that nothing serious had occurred to prevent them from passing the following day likewise. Nay, I knew also that what appeared in their way of life painful to me, might be agreeable to them ; and it chanced, indeed, a little while afterwards, that an active and prosperous man of business, speaking to one of my friends of the disappointment he had felt in a visit to Italy, remarked, especially, that he was not able to endurc more than three days at Venice, because there was no noise there.
61. But, granting the conteutment of the inhabitants of Iondon in consistently producing these sounds, how shall we say this vocal and instrumental art of theirs may com-
pare, in the scheme of Nature, with the vocal art of lower animals? We may indeed rank the danger-whistle of the engines on the bridge as an excruciating luman improvement on that of the marmot; and the trampling of feet and grinding of wheels, as the human accentuation of the sounds produced by insects, by the friction of their wings or thighs against their sides: but, even in this comparison, it may cause us some humiliation to note that the cicada and the cricket, when pleased to sing in their vibratory manner, have leisure to rest in their delight; and that the flight of the firefly is silent. But how will the somds we produce compare with the song of birds? This London is the principal nest of men in the world; and I was standing in the centre of it. In the shops of Fleet Street and Ludgate Hill, on each side of me, I do not doubt I could lave bought any quantity of books for children, which by way of giving them religious, as opposed to secular, instruction, informed them that birds praised God in their songs. Now, though on the one haud, yon may be very certain that birds are not machines, on the other hand it is just as certain that they have not the smallest intention of praising God in their songs; and that we cannot prevent the religious education of our clildren more utterly than by begimning it in lies. But it might be expected of ourselves that we should do so, in the songs we send up from our principal nest! And although, under the dome at the top of Ladgate Hill, some attempt of the kind may be made every seventh day, by a limited number of
persons, we may again reflect, with humiliation, that the birds, for better or worse, sing all, and every day; and I conld not but ask myself, with momentarily increasing curiosity, as I endeavoured to trace the emotions and occupations of the persons who passed by me, in the expression of their faces-what would be the effect on them, if any creatures of higher order were snddenly to appear in the midst of them with any such message of peace, and invitation to rejoicing, as they had all been professing to commemorate at Christmas.
62. Perhaps you recollect, in the lectures given on landscape during the spring of this year, my directing jour attention to a picture of Mantegna's, in the loan exhibition, representing a flight of twelve angels in blue sky, singing that Christmas song. I onght to tell you, however, that one of our English artists of good position dis sented from my opinion about the picture; and remarked that in England "we wanted good art, and not fumiy art." Whereas, to me, it is this vocal and architectural art of Ludgate Hill which appears fumny art; and not Mantegna's. But 1 am compelled to admit that could Mantegna's picture have been realized, the result would, in the eyes of most men, have been funnier still. For suppose that over Ludgate Hill the sky had indeed suddenly become blue instead of black; and that a flight of twelve angels, "covered with silver wings, and their feathers with gold," had alighted on the cornice of the railrnad bridge, as the doves alight on the cornices of St.

Mark's at Venice; and had invited the eager men of business below, in the centre of a city confessedly the most prosperons in the world, to join them for five minutes in singing the first five verses of such a psalm as the 103 rd -"Bless the Lord, oh my soul, and all that is within $m e$," (the opportunity now being given for the expressiou of their most hidden feelings) " all that is within me, bless His holy name, and forget not all his benefits." Do you not even thus, in mere suggestion, feel shocked at the thought, and as if my now reading the words were profane? And cannot you fancy that the sensation of the crowd at so violent and strange an interruption of traftic, might be somewhat akin to that which I had occasion in my first lecture on sculpture to remind yon of,--the feeling attribnted by Goethe to Mephistopheles at the song of the angels: "Discord I hear, and intolerable jingling?"
63. Nay, farther, if indeed none of the benefits bestowed on, or accomplished by, the great city, were to be forgotten, and if search were made, thronghont its confines, into the results of its wealth, might not the literal discord in the words themselves be greater than the felt discord in the sound of them?

I have here in my hand a cutting from a newspaper, which I took with me three years ago, to a meeting in the interest of social science, held in the rooms of the Society of Arts, and nuder the presidency of the Prime Minister of England. Under the (so called) 'classical' paintinge
of Barry, representing the philosophy and poetry of the ancients, Mr. Gladstone was in the chair: and in his presence a member of the society for the promotion of Social Science propounded and supported the statement, not irrelevant to our present inquiry, that the essential nature of man was that of a beast of prey. Though, at the time, (suddenly called upon by the author of Tom Brown at Oxford), I feebly endeavoured to contradict that Socially Scientific person, I do not at present desire to do so. I have given you a creature of prey for comparison of knowledge. "Doth the eagle know what is in the pit?" and in this great nest of ours in London, it would be well if to all our children the virtue of the ereature of prey were fulfilled, and that, indeed, the stir and tnmult of the city were "as the eagle stirreth up her nest, and fluttereth over her young." But the slip of paper I had then, and have now, in my hand,* contains information about the state of the nest, ineonsistent with such similitude. I am not answerable for the juxtaposition of paragraphs in it: The first is a proposal for the bnilding of a new church in Oxford, at the cost of twenty thousand pounds; the second is the account of the inquest on a woman and her child who were starved to death in the Isle of Dogs. The bodies were found lying, without covering, on a bed made of heaped rags; and there was no furniture in the room but a wooden stool, on which lay a tract entitled "The Goodness of God." The husband, who had been

[^4]out of work for six months, went mad two daye after. wards ; and being refused entrance at the workhonse because it was "full of mad people," was carried off, the Pall Mall. Gazette says not where.
64. Now, gentlemen, the question I wish to leave with you to-day is whether the Wisdom, which rejoices in the habitable parts of the earth, and whose delights are with the sons of men, can be supposed, undel circumstances snch as these, to delight herself in that most closely and increasingly inhabited portion of the globe which we ourselves now dwell on; and whether, if she cannot grant us to surpass the art of the swallow or the eagle, she may not require of us at least, to reach the level of their happiness. Or do yon serionsly think that, either in the life of Ludgate Hill, or death of the Isle of Dogs; in the art of Ludgate Hill, or idleness of the Isle of Dogs; and in the science and sanity of Ludgate Hill, or nescience and insanity of the Isle of Dogs, we have, as matters stand now, any clear encouragement to repeat, in that 103rd psalm, the three rerses following the five I named; and to believe in our hearts, as we say with our lips, that we have jeet, dwelling among res, unoffended, a God "who forgiveth all our iniquities, who healeth all our diseases ; who redeemeth our life from destruction, who crowneth us with loving kindness and tender mercies, and who satisfieth our mouth with good things, so that our youth is renewed like the eagle's?"

## LECTUREIV.

## THE POWER OF MODESTY IN SCIENCH AND ART.

17th February, 1872.
65. I belisve, gentlemen, that some of you must have been surprised;--and, if I succeeded in making my last lecture clearly intelligible, many ought to have been surprised,--at the limitations I asked you to admit with respect to the idea of science, and the position which I asked you to assign to it. We are so much, by the chances of our time, accustomed to think of science as a process of discovery, that I am sure some of you must have been gravely disconcerted by my requesting, and will to-day be more disconcerted by my firmly recommending, you to use the word, and reserve the thonght, of science, for the acquaintance with things long since discovered, and established as true. We have the misfortune to live in an epoch of transition from irrational dnlness to irrational excitement; and while once it was the highest courage of science to question anything, it is now an agony to her to leave anything unquestioned. So that, mnawares, we come to measure the dignity of a scientific person by the newness of his
assertions, and the dexterity of his methods in debate; entirely forgetting that science cannot become perfect, as an occupation of intellect, while anything remains to be discovered; nor wholesome as an instrument of education, while anything is permitted to be debated.
66. It appears, doubtless, a vain idea to you that an end shonld ever be put to discovery; but remember, such impossibility merely signities that mortal science must remain imperfect. Nevertheless, in many directions, the limit to practically useful discovery is rapidly being approached; and you, as students, wonld do well to suppose that it has been already attained. To take the science of ornithology, for instance: I suppose you would have very little hope of shooting a bird in England, which should be strange to any master of the science, or of shooting one anywhere, which would not fall under some species already described. And although at the risk of life, and by the devotion of many years to observation, some of you-might hope to bring home to our museum a titmouse with a spot on its tail which had never before been seen, I strongly advise you not to allow your studies to be disturbed by so dazzling a hope, nor your life exclusively devoted even to so important an object. In astronomy, the fields of the sky have not yet, indeed, been ransacked by the most costly instruments; and it may be in store for sone of you to announce the existence, or even to analyze the materials, of some luminous point which may be seen
two or three times in the course of a century, by any one who will journey to India for the purpose; and, when there, is favoured by the weather. But, for all practical purposes, the stars already named and numbered are as many as we require to hear of; and if you thoroughly know the visible motions, and clearly conceive the known relations, even of those which can be seen by the naked eye, you will have as much astronomy as is necessary, either for the occupation of thought, or the direction of navigation.
67. But, if you were discontented with the limit I proposed for your sciences, much more, I imagine, you were doubtful of the ranks $I$ assigned to them. It is not, I know, in your modern system, the general practice to put chemistry, the science of atome, lowest, and theology, the science of Deity, lighest: nay, many of us have ceased to think of theology as a science at all, but rather as a speculative pursnit, in subject, separate from sciense; and in temper, opposed to her.

Yet it can scarcely be necessary for me to point out to you, in so many terms, that what we call theology, if true, is a science; and if false, is not theology; or that the distinction even between natural science and theology is illogical; for you might distinguish indeed between natural and unnatural science, but not between natural and spiritnal, unless you had determined first that a spirit had no nature. You will find the facts to be, that entirely
true knowledge :s both possible and necessary-first of facts relating to matter, and then of the forces and passions that act on or in matter; -that, of all these forces, the noblest we can know is the energy which either imagines, or perceives, the existence of a living power greater than its own; and that the study of the relations which exist between this energy, and the resultant action of men, are as much subjects of pure science as the curve of a projectile. The effect, for instance, npon your temper, intellect, and conduct during the day, of your going to chapel with or without belief in the efficacy of prayer, is just as much a subject of definite science, as the effect of your breakfast on the coats of your stomach. Which is the higher knowledge, I have, with confidence, told you; and am not afraid of any test to which you may submit my assertion.
68. Assuming such limitation, then, and such rank, for our knowledge ; assuming, also, what I have now, perhaps to your weariness, told you, that graphic art is the shadow, or image, of knowledge, -I wish to point out to you today the function, with respect to both, of the virtuc called by the Greeks ' $\sigma \omega \phi \rho o \sigma v v_{\eta}$,' 'safencss of mind,' corresponding to the 'salus' or 'sanitas' mentis, of the Latins; 'health of heart' is, perhaps, the best English; if we receive the words ' mens,' ' $\mu \hat{\eta} \nu \iota \rho$,' or ' $\phi \rho \bar{\eta} \nu$,' as expressing the passionate soul of the human being, distinguished from the intellectual; the 'mens sana' being possible to all of us, though the contemplative range of the higher
wisdom nay be above our eapacities ; so that to each of us Heaven only permits the ambition of being roфós; but commands the resolution to be $\sigma \omega \emptyset \phi \rho \omega$.
69. And, withoint discussing the use of the word by different writers, I will tell you that the clearest and safest idea of the mental state itself is to be gained from the representations of it by the words of ancient Christian religion, and even from what you may think its superstitions. Without any diseussion also as to the personal existence or traditional eharacter of evil spirits, you will find it a practical fact, that external temptations and inevitable trials of temper, lave power against you which your health and virtue depend on your resisting ; that, if not resisted, the evil energy of them will pass into your own heart, $\phi \rho \bar{\eta} \nu$, or $\mu \hat{\eta} \nu \iota s$; and that the ordinary and vulgarized phrase" the Devil, or betraying Spirit, is in him" is the most scientifically accurate which you can apply to any person so influenced. You will find also that, in the compass of literature, the casting out of, or cleansing from, such a state is best symbolized for you by the image of one who had been wandering wild and naked among tombs, sitting still, clothed, and in his right mind, and that in whatever literal or figurative sense you receive the Biblical statement of what followed, this is absolutely certain, that the herd of swine hastening to their destruction, in perfect sympathy with each other's fury, is the most accurate symbol ever given, in literature, of consum-

(The conditions of insanity,* delighting in scenes of death, which affect at the present time the arts of revolntionary Europe, were illustrated in the sequel of this lecture: but I neither choose to take any permanent notice of the examples I referred to, nor to publish any part of what I said, until I can enter more perfectly into the analysis of the elements of evil passion which always distorted and polluted even the highest arts of Greek and Christian loyal religion ; and now occupy in deadly entireness, the chambers of imagination, devastated, and left desolate of joy, by impiety, and disobedience.
In relation to the gloon of gray colour characteristic especially of the modern French revolutionary school, I entered into some examination of the conditions of real temperance and reserve in colour, showing that it consisted not in refusing colour, but in governing it; and that the most pure and bright colours might be thus perfectly governed, while the most dull were probably also the most violent and intemperate. But it would be useless to print this part of the lecture withont the colonrillustrations used.
Passing to the consideration of intemperance and immodesty in the choice even of landscape subjects, I referred thus, for contrast, to the quietude of Turner's "Greta and Tees.")
70. If you wish to feel the reserve of this drawing,

[^5]look, first, into the shops at their display of common chromo-lithotints; see how they are made up of Matterhorns, Monte Rosas, blue glaciers, green lakes, white towers, magnificent banditti, romantic peasantry, or al-ways-successful sportsmen or fishermen in Highland costuine; and then see what Turner is content with. No Matterhorns are needful, or even particularly pleasing to him. A bank, some eight or ten feet high, of Yorkshire shale is enough. He would not thank you for giving him all the giant forests of California;-would not be so much interested in them, nor half so happy anong them, as he is here with a switch of oak sapling, which the Greta has pnlled down among the stones, and teased awhile, and which, now that the water is lower, tries to get up again, out of its way.

He does not want any towers or towns. Here you are to be contented with three square windows of a country gcotleman's house. He does not want resplendent banditti. Behold! here is a krown cow and a white one: what would you have more? And this scarcely-falling rapid of the Tecs-here pansing to circle round a pool, and there langling as it trips over a ledge of rock, six or seven inches high, is more to him-infinitely morethan wonld be the whole colossal drainage of Lake Erie into Lake Ontario, which Carlyle has justly taken for a type of the Niagara of our national precipitous à ${ }^{\circ} \rho o \sigma u ́ v \eta$.
71. I need not point out to yon the true temperance of
colour in this drawing-how slightly green the trees are, how softly blue the sky.

Now I put a chromo-lithotint beside it.
Well, why is that good, this bad? Simply becanse if you think, and work, and discipline yourselves nobly, you will come to like the Greta and Tees; if not, you will come to like this. The one is what a strong man likes; the other what a weak one likes: that is modest, full of true aí $\dot{\omega} \varsigma$, noble restraint, noble reverence;--this has no aiठळ̀s, no fear, no measure :-nor even purpose, except, by accumulation of whatever it can see or snatch, to move the vile apathy of the public $\dot{a} \phi \rho o \sigma \dot{v} \nu \eta$ into sensation.
72. The apathy of à áparv́vq-note the expression! You might think that it was $\sigma \omega \phi \rho o \sigma u ́ \nu \eta$, which was apathetic, and that intemperance was full of passion. No; the exact contrary is the fact. It is death in ourselves which seeks the exaggerated external stimulus. I must return for a moment to the art of modern France.

The most complete rest and refreshment I can get, when I am overworked, in London (for if I try to rest in the fields, I find them turned into villas in the course of the week before), is in seeing a French play. But the French act so perfectly that I am obliged to make sure beforehand that all is to end well, or it is as bad as being helplessly present at some real misery.
I was beguiled the other day, by seeing it announced as a "Comédie," into going to see "Frou-Frou." Most of you probably know that the three first of its five acts are
comedy, or ar least playful drama, and that it plunges down, in the two last, to the sorrowfullest catastrophe of all conceivable-though too frequent in daily life-in which irretrievable grief is brought about by the passion of a moment, and the ruin of all that she loves, caused by the heroic error of an entirely good and unselfisl person. The sight of it made me thoroughly ill, and I was not myself again for a week.

But, some time afterwards, I was speaking of it to a lady who knew French character well; and asked her how it was possible for a people so quick in feeling to endure the action before them of a sorrow so poignant. She said, "It is because they have not sympathy euough: they are interested only by the external scene, and are, in truth, at present, dull, not quick in feeling. My own French maid went the other evening to see that very play: when she came home, and I asked her what she thought of it, she said 'it was charming, and she had amused herself immensely.' 'Amused! but is not the story very sad?' 'Oh, yes, mademoiselle, it is bieu triste, but it is charming; and then, how pretty Frou-Frou looks in her silk dress!'"
73. Gentlemen, the French maid's mode of regarding the tragedy is, if you think of it, a most true image of the way in which fashionable society regards the worldsuffering, in the midst of which, so long as it can amuse itself, all seems to it well. If the ball-room is bright, and the dresses pretty, what matier how much horror is bo-
neath or around? Nay, this apathy checks us in our highest spheres of thought, and chills our most solemn purposes. You know that I never join in the common outcries against Ritnalism; yet it is too painfully manifest to me that the English Church itself has withdrawn her eyes, from the tragedy of all churches, to perk herself up anew with casement and vestment, and say of herself, complacently, in her sacred moוкı入ia, "How pretty Frou-Frou is, in her silk dress!"
74. We recoguize, however, without difficulty, the peril of insatiableness and immodesty in the pleasures of Art. Less recognized, but therefore more perilous, the insatiableness and immodesty of Science tempt us through our very virtues. The fatallest furies of scientific à $\phi \rho o \sigma v v^{\nu} \eta$ are consistent with the most noble powers of self-restraint and self-sacrifice. It is not the lower passions, but the loftier hopes and most honourable desires which become deadliest when the charm of them is exalted by the vanity of science. The patience of the wisest of Greek heroes never fails, when the trial is by danger or pain; but do you recollect that before his trial by the song of the Sirens, the sea becomes calm? And in the few words which Homer has told you of their song, you have not perhaps yet with enongh care observed that the form of temptation is precisely that to which a man victorious over every fleshly trial would be likely to jield. The promise is not that his body shall be gratified, but that his soul shall rise into rapture; he is not urged, as by the
subtlety of Comus, to disdain the precepts of wisdom, but invited, on the contrary, to learn,-as you are all now invited by the $\dot{a} \phi \rho o \sigma u ́ \nu \eta$ of your age,--better wisdom from the wise.
"For we know all" (they say) "that was done in Troy according to the will of the gods, and we know every. thing that is upon the all-nourishing earth."

All heavenly and earthly knowledge, you see. I will read you Pope's expansion of the verses; for Pope never alters idly, but always illustrates when he expands.
"Oh stay, oh pride of Greece !
(You hear, they begin by flattery).

> Ulysses, stay, Oh cease thy course, and listen to our lay, Blest is the man ordained our voice to hear, The song instructs the soul, and charms the ear, Approach! Thy soul shall into raptures rise; Approach! and learn new wisdom from the wise. We know whate'er the kings of mighty name Achieved at Ilion in the field of Fame, Whate'er beneath the Sun's bright journey lies, Oh, stay, and learn new wisdom from the wise."

1s it not singular that so long ago the danger of this novelty of wisdom should have been completely discemed? Is it not stranger still that three thousand years have passed by, and we have not yet been able to learn the lesson, but are still eager to add to our knowledge, rather than to use it ; and everv day more passionate in discorer-
ing,-more violent in competition,-are every day more cold in admiration, and more dull in reverence.
75. But, gentlemen, Homer's Ulysses, bound to the mast, survives. Dante's Olysses is bound to the mast in another fashion. He, notwithstanding the protection of Athena, and after all his victories over fate, is still restless under the temptation to seek new wisdom. He goes forth past the pillars of Hercules, cheers his crew amidst the uncompassed solitudes of the Atlantic, and perishes in sudden Charybdis of the infinite sea. In hell, the restless flame in which he is wrapt continually, among the advisers of evil, is seen, from the rocks above, like the firefly's flitting to and fro; and the waving garment of torture, which quivers as he speaks, and aspires as he moves, condemns him to be led in eternal temptation, and to be delivered from evil never more.

## LECTURE V.

## THE POWER OF CONTENTMENT IN SCIENCE AND ART.

22nd February, 1872.
76. I must ask you, in order to make these lectures of any permanent use, to be careful in keeping note of the main conclusion at which we arrive in the course of each, and of the sequence of such results. In the first, I tried to show you that Art was only wise, when unselfish in her labour; in the second, that Science was only wise when unselfish in her statement; in the third, that wise Art was the shadow, or visible reflection, of wise Science; and in the fourth, that all these conditions of good must be pursned temperately and peacefully. I have now farther to tell you that they must be pursued independently.
77. You have not often heard me use that word "independence." And, in the sense in which of late it has been accepted, you have never heard me use it but with contenpt. For the true strength of every human soul is to be dependent on as many nobler as it can discern, and to be depended upon, by as many inferior as it can reach.

But to-day I use the word in a widely different sense. I think you must have felt, in what amplification I was able to give you of the idea of Wisdom as an unselfish influence in Art and Science, how the highest skill and knowledge were founded in human teuderness, and that the kindly Art-wisdom which rejoices in the habitable parts of the earth, is only another form of the lofty Scientific charity, which ' rejoices in the truth.' And as the first order of Wisdom is to know thyself-though the least creature that can be known-so the first order of Charity is to be sufficient for thyself, thongh the least creature that can be sufficed; and thus contented and appeased, to be girded and strong for the ministry to others. If sufficient to thy day is the evil thereof, how much more should be the good!
78. I have asked you to recollect one aphorism respecting Science, one respecting Art; let me-and I will ask no more at this time of asking--press you to learn, farther, by heart, those lines of the Song of the Sirens: six lines of Homer, I trust, will not be a weariness to you:-
"No one ever rowed past this way in his black ship,
before he had listened to the honey-sweet singing of our lips. But he stays pleased, though he may know much. For we know all things which the Greeks and Trojans did in the wide Trojan plain, by the will of the gods, and we know what things take place in the much nourishing earth." And this, remember, is absolutely true. No man ever went past in the black ship; obeying the grave and sad law of life by which it is appointed for mortals to be victors on the ocean, but he was tempted, as he drew near that deadly island, wise as he might be, ( $\kappa a i$ in $\pi$ eíova $\epsilon i \delta \omega$ ss),-by the voices of those who told him that they knew everything which had been done by the will of God, and everything which took place in earth for the service of man.
79. Now observe those two great temptations. You are to know everything that has been done by the will of God: and to know everything that is vital in the earth. And try to realize to yourselves, for a little while, the way in which these two siren promises have hitherto tronbled the paths of men. Think of the books that have been written in false explanation of Divine Providence: think of the efforts that have been made to show that the particular conduct which we approve in others, or wish ourselres to follow, is according to the will of God. Think what ghastly convulsions in thought, and vilenesses in action, have been fallen into by the sects which thought they had adopted, for their patronage, the perfect purposes of Heaven. Think of the 'ain research, the wasted
centuries of those who have tried to penetrate the secrets of life, or of its support. The elixir vitæ, the philosopher's stone, the germ-cells in meteoric iron, ' $\epsilon \pi i \nmid \chi \theta o \nu ̀$ тоu入ußoтєipg.' But at this day, when we have loosed the last band from the masts of the black ship, and when, instead of plying every oar to escape, as the crew of Hcmer's Ulysses, we row like the crew of Dante's Ulysses, and of our oars make wings for our foolish flight,

> E, volta nostra poppe nel mattino
> De' remi facemmo ale al folle volo-
the song of the sirens becomes fatal as never yet it has been in time. We think ourselves privileged, first among *men, to know the secrets of Heaven, and fulfil the economy of earth; and the result is, that of all the races that yet have been put to shame by their false wisdom or false art,-which have given their labour for that which is not bread, and their strength for that which satisfieth not,-we have most madly abandoned the charity which is for itsclf sufficing, and for others serviceable, and have become of all creatures the most insufficient to ourselves, and the most malignant to our neighbours. Granted a given degree of knowledge--granted the ' $\kappa a i$ i $\pi \lambda \epsilon$ iova cióos' in science, in art, and in literature,-and the present relations of feeling between France and Germany, between England and America, are the most horrible at once in their stupidity and malignity, that have
ever taken place on the globe we inhabit, even though all of its great histories are of $\sin$, and all its great songs, of death.
80. Gentlemen, I pray you very solemnly to put that idea of knowing all things in Heaven and Earth out of your hearts and heads. It is very little that we can ever know, either of the ways of Providence, or the laws of existence. But that little is enough, and exactly enough: to strive for more than that little is evil for us; and be assured that beyond the need of our narrow being,--beyond the range of the kingdom over which it is ordained for each of us to rule in serene aủ兀व́ркєia and self-possession, he that increaseth toil, increaseth folly; and he that increaseth knowledge, increaseth sorrow.
81. My endeavour, therefore, to-day will be to point out to you how in the best wisdom, that there may be happy advance, there must first be happy contentment; that, in one sense, we must always be entering its kingdoin as a. little child, and pleased yet for a time not to put away childish things. And while I hitherto have endeavoured only to show how modesty and gentleness of disposition purified Art and Science, by pernitting us to recognize the superiority of the work of others to our own-to-day, on the contrary, I wish to indicate for you the uses of infantile self-satisfaction; and to show you that it is by no error or excess in our nature, by no corruption or distortion of our being, that we are disposed to take delight in the little things that we can do ourselres, more than in
the great things done by other people. So only that we recognize the littleness and the greatness, it is as much a part of true Temperance to be pleased with the little that we know, and the little that we can do, as with the little that we have. On the one side Indolence, on the other Covetousness, are as much to be blamed, with respect to our Arts, as our possessions; and every man is intended to find an exquisite personal happiness in his own small skill, just as he is intended to find happiness in his own small house or garden, while he respects, without coveting, the grandeur of larger domains.
82. Nay, more than this: by the wisdom of Nature, it has been appointed that more pleasure may be taken in small things than in great, and more in rude Art than in the finest. Were it otherwise, we might be disposed to complain of the narrow limits which bave been set to the perfection of human skill.

I pointed out to you, in a former lecture, that the excellence of sculpture had been confined in past time to the Athenian and Etrurian vales. The absolute excellenee of painting has been reached only by the inhabitants of a single city in the whole world; and the fautless manner of religions architecture holds only for a period of fifty years out of six thousand. We are at present trimenting ourselves with the vain effort to teach men everywhere to rival Venice and Athens,-with the practical result of having lost the enjoyment of Art altogether ;instead of being eontent to amuse ourselves still with the
painting and carving which were possible once, and would be pleasant always, in Paris, and London, at Strasbourg, and at York.

I do not doubt that you are greatly startled at my saying that greater pleasure is to be received from inferior Art than from the finest. But what do yon suppose makes all men look back to the time of childhood with so much regret, (if their childhood has been, in any moderate degree, healthy or peaceful)? That rich charm, which the least possession had for us, was in consequence of the poorness of our treasures. That miraculous aspect of the nature around us, was because we had seen little, and knew less. Every increased possession loads us with a new wearincss; every piece of new knowledge diminishes the faculty of admiration; and Death is at last appointed to take us from a scene in which, if we were to stay longer, 110 gift could satisfy us, and no miracle surprise.
83. Little as I myself know, or can do, as compared with any man of essential power, my life has chanced to be one of gradnal progress in the things which $I$ began in childish choice; so that I can measure with almost mathematical exactitude the degree of feeling with which less and greater degrees of wealth or skill affect my mind.

I woll remember the delight with which, when I was beginning mineralogy, I reccived from a friend, who had made a vojage to Pern, a little bit of limestone about the size of a hazel nut, with a small film of native silver ad
hering to its surface. I was never weary of contemplating my treasure, and could not have felt myself richer had I been master of the mines ef Copiapo.

I am now about to use as models for your roek drawing stones which my year's income, when I was a boy, would not have bought. But I have long ceased to take any pleasure in their possession; aud am only thinking, now, to whom else they can be of nse, since they can be of no more to me.
84. But the loss of pleasure to me caused by advance in knowledge of drawing has been far greater than that induced by my riches in minerals.

I have placed, in your reference series, one or two drawings of architecture, made when I was a youth of twenty, with perfect ease to myself, and some pleasure tc other people. A day spent in sketching then brought with it no weariuess, and infinite complacency. I know better now what drawing should be; the effort to do my work rightly fatigues me in an hour, and I never care to look at it again from that day forward.
85. It is true that men of great and real power do the best things with comparative ease; but you will never hear them express the complacency which simple persons feel in partial success. There is nothing to be regretted in this; it is appointed for all men to enjoy, but for few to achieve.

And do not think that I am wasting your time in dwelling on these simple moralities. From the facts I have
been stating we must derive this great principle for all effort. That we must endeavour to do, not what is absolutely best, but what is easily within our power, and adapted to onr temper and condition.
86. In your educational series is a lithographic drawing, by Prout, of an old house in Strasbourg. The carvings of its woodwork are in a style altogether provincial, yet of which the origin is very distant. The delicate Renaissance architecture of Italy was affeeted, even in its finest periods, by a tendency to throw out convex masses at the bases of its pillars; the wood-carvers of the 16 th century adopted this bulged form as their first element of ornamentation, and these windows of Strasbourg are only imitations by the German peasantry of what, in its finest type, yon mnst seek as far away as the Dnomo of Bergamo.

But the burgher, or peasant, of Alsace enjoyed his rude imitation, adapted, as it was, boldly and frankly to the size of his honse and the grain of the lareh logs of which he built it, infinitely more than the refined Italian enjojed the floral luxuriance of his marble: and all the treasures of a great exhibition could not have given him the tenth part of the exultation with which he saw the gable of his roof completed over its jutting fret-work; and wrote among the rude intricacies of its sculpture, in flomished black letter, that " He and his wife had built their house with God's help, and prayed Him to let them live long in it,--ihey, and their children."
87. But it is not only the rustic method of architecture which I wish you to note in this plate; it is the rustic method of drawing also. The manner in which these blunt timber carvings are drawn by Prout is just as provincial as the carvings themselves. Born in a far-away district of England, and learning to draw, unhelped, with fishing-boats for his models; making his way instinctively until he had command of his pencil enough to secure a small income by lithographic drawing; and finding picturesque character in buildings from which all the finest lines of their carving had been effaced by time ;-possessing also an instinct in the expression of such subjects so peculiar as to win for liim a satisfying popnlarity, and, far better, to enable him to derive perpetual pleasnre in the seclusion of country hamlets, and the quiet streets of deserted cities,-Pront had never any motive to acquaint himself with the refinements, or contend with the difficulties, of a more accomplished art. So far from this, his manner of work was, by its very imperfection, in the most perfect sympathy with the snbjects he enjoyed. The broad chalk touches in which he has represented to us this house at 'Strasbourg are entirely sufficient to give true idea of its effect. To have drawn its ornaments with the subtlety of Leonardesque delineation would only have exposed their faults, and mocked their rusticity. The drawing would have become painful to you from the sense of the time which it had taken to represent what was not worth the labour, and to direct your attention to what
could only, if closely examined, be matter of offence. But here you have a simple and provincial draughtsman happily and adequatcly expressing a simple and provincial architecture; nor could either builder or painter have become wiser, but to their loss.
88. Is it then, you will ask me, seriously to be recommended, and, however recommendable, is it possible, that men should remain contented with attainments which they know to be imperfect? and that now, as in former times, large districts of country, and generations of men, should be enriched or amused by the products of a clumsy ignorance? I do not know how far it is possible, but in know that wherever you desire to have true art, it is necessary. Ignorance, which is contented and clumsy, will produce what is imperfect, but not offensive. But ignorance discontented, and dexterous, learning what it cannot understand, and initating what it cannot enjoy, produces the most loathsome forms of manufacture that can disgrace or mislead humanity. Some years since, as I was looking through the modern gallery at the quict provincial Ger man School of Düsseldorf, I was fain to leave all their epic and religions designs, that I might stay long before a little painting of a shepherd boy carving his dog out of a bit of deal. The dog was sitting by, with the satisficd and dignified air of a personage abont for the first time ir his life to be worthily represented in scnlpture; and his master was evidently succeeding to his mind in expressing the features of his friend. The little scene was one
which, as you know, must take place continually among the cottage artists who supply the toys of Nuremberg and Berne. Happy, these! so long as, undisturbed by ambition, they spend their leisure time in work pretending only to amuse, yet capable, in its own way, of showing accomplished dexterity, and vivid perception of nature. We, in the hope of doing great things, have surrounded our workmen with Italian models, and tempted them with prizes into competitive mimicry of all that is best, or that we imagine to be best, in the work of every people under the sun. And the result of our instruction is only that we are able to produce, -I am now quoting the statement I made last May, "the most perfectly and roundly illdone things" that ever came from human hands. I should thankfully put upon my chimney-piece the wooden dog cut by the shepherd boy: but I should be willing to forfeit a large sum, rather than keep in my room the number 1 of the Kensington Museum-thus described in its catalogue-"Statue in black and white marble, of a Newfomalland dog standing on a serpent, which rests on a marble cushion;-the pedestal ornamented with Pietra Dura fruits in relief."
89. Yon will, however, I fear, imagine me indulging in my usual paradox, when I assure you that all the efforts we have been making to surround ourselves with heterogeneons means of instruction, will have the exactly reverse effect from that which we intend;-and that, whereas formerly we were able only to do a little well, we are
qualifying ourselves now to do everything ill. Nor is the result confined to our workmen only. The introduction of French dexterity and of German erndition has been harmful chiefly to our most accomplished artists-and in the last Exhibition of our Royal Academy there was, I think, no exception to the manifest fact that every painter of reputation painted worse than he did ten years ago.
90. Admitting, however, (not that I suppose you will at once admit, but for the sake of argument, supposing,) that this is true? what, we have farther to ask, can be done to discourage ourselves from calamitous emulation, and with-: draw our workmen from the sight of what is too good to be of use to them.

But this question is not one which can be determined by the needs, or limited to the circumstances of Art. To live generally more modest and contented lives; to win the greatest possible pleasure from the smallest things; to do what is likely to be serviceable to our immediate neighbours, whether it seem to them admirable or not; to make no pretence of admiring what has really no hold upon our hearts; and to be resolute in refusing all additions to our learning, until we have perfectly arranged and secured what learning we have got;-these are conditions, and laws, of unquestionable $\sigma o \phi i a$ and $\sigma \omega \phi \rho o \sigma i v \eta$, which will indeed lead us up to fine art if we are resolved to have it fine; bnt will also do what is much better, make rude art precious.
91. It is not, however, by any means necessary that
provineial art should be rude, though it may be singular. Often it is no less delicate than quaint, and no less refined in grace than original in character. This is likely always to take place when a people of naturally fine artistic temper work with the respect which, as I endeavoured to show you in a former lecture, ought always to be paid to local material and circumstance.

I have placed in your educational series the photograph of the door of a wooden honse in Abbeville, and of the winding stair above; both so exquisitely sculptured that the real vine-leaves which had wreathed themsel ves about their pillars, cannot, in the photograph, be at once discerned from the carved foliage. The latter, quite as graceful, can only be known for art by its quaint setting.

Yet this school of sculpture is altogether provincial. It conld only have risen in a richly-wooded chalk country, where the sapling trees beside the brooks gave example to the workmen of the most intricate tracery, and the white cliffs above the meadows furnished docile material to his hand.
92. I have now, to my sorrow, learned to despise the elaborate intricacy, and the playful realizations, of the Norman designers; and can only' be satisfied by the reserved and proud imagination of the master schools. But the utmost pleasure I now take in these is almost as nothing, compared to the joy I used to have, when I knew no better, in the fretted pinnacles of Ronen, and white lace, rather than stone-work, of the chapels of Reu and Amboise

Yet observe that the first condition of this really precious provincial work is its being the best that can be done under the given circumstances; and the second is, that though provincial, it is not in the least frivolous or ephemeral, but as definitely civic, or public, in design, and as permanent in the manner of it, as the work of the most learned academies: while its execution brought out the energies of each little state, not necessarily in rivalship, but severally in the perfecting of styles which Nature had rendered it impossible for their neighbours to imitate.
93. This civic unity, and the feeling of the workman that he is performing his part in a great scene which is to endure for centuries, while yet, within the walls of his city, it is to be a part of his own peculiar life, and to be separate from all the world besides, developes, together, whatever duty he acknowledges as a patriot, and whatever complacency he feels as an artist.

We now build, in our villages, by the rules of the Academy of London; and if there be a little original vivacity or genius in any provincial workman, he is almost sure to spend it in making a ridiculous tor. Nothing is to me much more pathetic than the way that our neglected workmen thus throw their lives away.' As I was walking the other day through the Crystal Palace, I came upon a toy which had taken the leisure of five years to make; you dropped a penny into the chink of it, and immediately a little brass steam-engine in the middle
tarted into nervously hurried action; some bell-ringers uulled strings at the bottom of a church steeple which ad no top; two regiments of cavalry marched out from he sides, and manœuvred in the middle; and two welltressed persons in a kind of opera-box expressed their atisfaction by approving gestures.
In old Ghent, or Bruges, or York, such a man as the me who made this toy, with companions similarly minded, vould have been taught how to employ himself, not to heir less amusement, but to better purpose; and in their ive years of leisure hours they would have carved a flamroyant crown for the belfry-tower, and would have put himes into it that would have told the time miles away, vith a pleasant tune for the hour, and a variation for the [uarters, and cost the passers-by in all the city and plain rot so much as the dropping of a penny into a chink.
94. Do not doubt that I feel, as strongly as auy of you :an feel, the utter impossibility at present of restoring rrovincial simplicity to our country towns.
My despondency respecting this, and nearly all other natters which I know to be necessary, is at least as great, -it is certainly more painful to me, in the decline of life, -than that which any of' my younger hearers can feel. 3nt what I have to tell you of the unchanging principles f nature, and of art, must not be affected by either hope ir fear. And if I succeed in convincing you what these rinciples are, there are many practical consequences which you may deduce from them, if ever you find your-
selves, as young Englishmen are often likely to find themselves, in authority over foreigu tribes of peculiar or limited capacities.

Be assured that you can no more drag or compress men into perfection than you can drag or compress plants. If ever you find yourselves set in positions of authority, and are entrusted to determine modes of education, ascertain first what the people you would teach have been in the habit of doing, and encourage them to do that better. Set no other excellence before their eyes ; disturb none of their reverence for the past; do not think yourselves bound to dispel their ignorance, or to contradict their superstitions; teach them only gentleness and truth; redeem them by example from habits which you know to be unhealthy or degrading; but cherish, above all things, local associations, and hereditary skill.

It is the curse of so-called civilization to pretend to originality by the wilful invention of new methods of error, while it quenches wherever it has power, the noble originality of nations, rising out of the purity of their race, and the love of their native land.
95. I could say much more, but I think I have said enongh to justify for the present what you might otherwise have thought singular in the methods I shall adopt for your exercise in the drawing schools. I shall indeed endeavour to write down for you the laws of the art which is centrally best; and to exhibit to you a certain number of its mquestionable standards: but your own
actual practice shall be limited to objects which will explain to you the meaning, and awaken you to the beauty, of the art of your own country.

The first series of my lectures on sculpture must have proved to you that I do not despise either the workmanship or the mythology of Greece; but I must assert with more distinctness than even in my earliest works, the absolute unfitness of all its results to be made the guides: of English students or artists.

Every nation can represent, with prudence, or success, only the realities in which it delights. What you have with you, and before you, daily, dearest to your sight and heart, that, by the magic of your hand, or of your lips, you can gloriously express to others; and what you ought to have in your sight and heart,- what, if you have not, nothing else can be truly secn or loved,-is the human life of your own people, understood in its history, and admired in its presence.

And unless that be first made beautiful, idealism must. be false, and imagination monstrons.

It is your influence on the existing world which, in your studies here, you ongbt finally to consider; and although it is not, in that influence, my function to direct you, I hope you will not be discontented to know that I shall ask no effort from your art-genius, beyond the rational snggestion of what we may one day hope to see actually realized in England, in the sweetness of her landscape, and the dignity of her people.

In connection with the subject of this lecture, I may mention to you that I have received an interesting letter, requesting me to assist in promoting some improvements designed in the city of Oxford.

But as the entire charm and educational power of the city of Oxford, so far as that educational power depended on reverent associations, or on visible solemnities and serenities of architecture, have been already destroyed; and, as far as our own lives extend, destroyed, I may say, for ever, by the manufacturing suburb which heaps its ashes on one side, and the cheap-lodging suburb which heaps its brick-bats on the other; I am myself, either as antiquary or artist, absolutely indifferent to what happens next; except on grounds respecting the possible health, cleanliness, and decency which may yet be obtained for the increasing population.

How far cleanliness and decency bear on art and science, or on the changed functions of the university to its crowd of modern students, I have partly to consider in counection with the subject of my next lecture, and I will reserve therefore any definite notice of these proposed improvements in the city, until the next arossion of meets ing you

## LECTURE VI.

## THE RELATION TO ART OF THE SCIENCE OF LIGHT.

24th February, 1872.
96. I have now, perhaps to the exhaustion of your patience, but you will find, not without real necessity, defined the manner in which the mental tempers, ascertained by plilosophy to be evil or good, retard and advance the parallel studies of science and art.

In this and the two next following lectures I shall endeavour to state to you the literal modes in which the virtues of art are connected with the principles of exact science; but now, remember, I am speaking, not of the consummate science of which art is the image; but only of what science we have actually attained, which is often little more than terminology (and even that uncertain), with only a gleam of trme science here and there.
I will not delay you by any defence of the arrangement of sciences I have chosen. Of course we may at once dismiss chemistry and pure mathematics from our consideration. Chemistry can do nothing for art but mix her colours, and tell her what stones will stand weather; (I
wish, at this day, sle did as much; and with pure mathe natics we have nothing whatever to do; nor can that abstract form of ligh mathesis stoop to comprehend the simplicity of art. To a first wrangler at Cambridge, under the present conditions of his trial, statues will necessarily be stone dolls, and imaginative work unintelligible. We have, then, in trne fellowship with art, only the sciences of light and form, (optics and geometry). If you will take the first syllable of the word 'geometry' to mean earth in the form of flesh, as well as of clay, the two words sum every science that regards graphic art, or of which graphie art can represent the conclusions.
97. To-day we are to speak of optics, the science of seeing; -of that power, whatever it may be, which (by Plato's definition), "through the eyes, manifests colour to us."

Hold that definition always, and remember that ' light' means accurately the power that affects the eyes of animals with the sensation proper to them. The study of the effect of light on nitrate of silver is chemistry, not optics; and what is light to us may indeed shine on a stone; but is not light to the stone. The "fiat lux" of creation is, therefore, in the deep sense of it, "fiat anima."

We cannot say that it is merely "fiat oculns," for the effect of light on living organism, even when sightless,. cannot be separated from its influence on sight. A plant cunsists essentially of two parts, root and leaf: the leaf by
nature seeks light, the root by nature seeks darkness: it is not warmth or cold, but essentially light and shade, which are to them, as to us, the appointed conditions of existence.
98. And you are to remember still more distinctly that the words "fiat lux" mean indeed "fiat anima," because even the power of the eye itself, as such, is in its animation. You do not see with the lens of the eye. You see through that, and by means of that, bnt you see with the soul of the eye.
99. A great physiologist said to me the other day-it was in the rashness of controversy, and onght not to be remembered as a deliberate assertion, therefore I do not give his name--still he did say-that sight was " altogether mechanical." The words simply meant, if they meant anything, that all his physiology had never taught him the difference between eyes and telescopes. Sight is an absolutely spiritual phenomenon; accurately, aud only, to be so defined : and the "Let there be light," is as much, when you understand it, the ordering of intelligence, as the ordering of vision. It is the appointment of change of what had been else only a mechanical effluence from things unseen to things unseeing,-from stars that did not shine to earth that could not perceive ;-the change, I say, of that blind vibration into the glory of the sun and moon for human eyes; so rendering possible also the communication out of the unfathomable truth, of that portion of truth which is good for us, and animating to us, and is set to rule over the day and night of our joy and sorrow.
100. The sun was set thus 'to rule the day.' $\Lambda$ nd of late you have learned that he was set to rule everything else that we know of. Yon have been taught that, by the Syrens, as a piece of entirely new knowledge, much to be exulted over. We painters, indeed, have been for some time acquainted with the general look of the sun, and long before there were painters there were wise men,-ZZoroastrian and other,-who had suspected that there was power in the sun; but the Sirens of yesterday have somewhat new, it seems, to tell you of his authority, èmi $\chi \chi^{\theta o \nu i}$ $\pi o v \lambda \nu \beta o \tau \epsilon i \rho \eta$. I take a passage, almost at random, from a recent'scientific work.
"Just as the phenomena of water-formed rocks all owe their existence directly or indirectly chiefly to the sun's energý, so also do the phenomena interwoven with life. This has long been recognized by varions eminent British and foreign physicists; and in 1854 Professor -—, in his memoir on the method of palæontology, asserted that organisms were but manifestations of applied physics and. applied chemistry. Professor - puts the generalizations of physicists in a few words: when speaking of the sun, it is remarked-'He rears the whole vegetable world, and through it the animal; the lilies of the field are his workmanship, the verdure of the meadows, and the cattle upou a thousand hills. He forms the muscle, he urges the blood, he builds the brain. His fleetness is in the lion's foot; he springs in the panther, he soars in the eagle, he slides in the snake. He builds the forest and
hews it down, the power which raised the tree and that which wields the axe being one and the same.'"

All this is exceedingly true; and it is new in one respect, namely, in the ascertainment that the quantity of solar force necessary to produce motive power is measurable, and, in its sum, unalterable. For the rest, it was perfectly well known in Homer's time, as now, that animals conld not move till they were warm; and the fact that the warmth which enables tliem to do so is finally traceable to the sun, would have appeared to a Greek physiologist, no more interesting than, to a Greek poet, would have been the no less certain fact, that "Tout ce qui se peut dire de beau est dans les dictionnaires; il n'y a que les mots qui sont transposées "-Evंerything fine, that can be said, is in the dictionaries; it is only that the words are transposed.

Yes, indeed ; but to the $\pi o \iota \eta \tau \eta े s$ the gist of the matter is in the transposition. The sun does, as the delighted physicist tells you, unquestionably " slide in the snake;" but how comes he to adopt that manner, we artists ask, of (literally) transposition ?
101. The summer before last, as I was walking in the woods near the Giesbach, on the Lake of Brientz, and moving very quietly, I came suddenly on a small steelgrey serpent, lying in the middle of the path; and it was greatly surprised to see me. Serpents, however, always bave complete command of their feelings, and it looked at me for a quarter of a minnte without the slightest change
of posture : then, with an almost imperceptible motion, it began to withdraw itself beneath a cluster of leaves. Without in the least hastening its action, it gradually concealed the whole of its body. I was abont to raise one of the leaves, when I saw what I thought was the glance of another serpent, in the thicket at the path side; but it was the same one, which, having once withdrawn itself from observation beneath the leaves, used its ntmost agility to spring into the wood; and with so instantaneous a flash of motion, that I never saw it leave the covert, and only caught the gleam of light as it glided away into the copse.
102. Now, it was to me a matter of supreme indifference whether the force which the creature used in this action was derived from the sum, the moon, or the gasworks at Berne. What was, indeed, a matter of interest to me, was just that which would have struck a peasant, or a child;-namely, the calculating wisdom of the creature's device; and the exquisite grace, strength, and precision of the action by which it was accomplished.
103. I was interested then, I say, more in the device of the creature, than in its source of motion. Nevertheless, I am pleased to hear, from men of science, how necessarily that motion proceeds from the sun. But where did its device come from? There is no wisdom, no device in the dust, any more than there is warmth in the dust. The springing of the serpent is from the sum:-the wisdom of the serpent,-whence that?
104. From the sum also, is the only answer, I suppose,
possible to physical science. It is not a false answer: quite true, like the other, up to a certain point. To-day, in the strength of your youth, you may know what it is to have the power of the sun taken out of your arms and legs. But when you are old, you will know what it is to have the power of the sun taken out of your minds also. Such a thing may happen to you, sometimes, even now; but it will continually happen to you when you are my age. You will no more, then, think over a matter to any good purpose after twelve o'clock in the day. It may be possible to think over, and, much more, to talk over, matters, to little, or to bad, purpose after twelve o'clock in the day. The members of your national legislature do their work, we know, by gaslight; but you don't suppose the power of the sun is in any of their devices? Quite seriously, all the vital functions,-and, like the rest and with the rest, the pure and wholesome faculties of the brain,-rise and set with the sun: your digestion and intellect are alike dependent on its beams; your thoughts, like your blood, flow from the force of it, in all scientific accuracy and necessity. Sol illuminatio nostra est; Sol salus nostra; Sol sapientia nostra.

And it is the final act and outcome of lowest national atheism, since it cannot deny the sun, at least to strive to do without it; to blast the day in heaven with smoke, and prolong the dance, and the council, by. night, with tapers, until at last, rejoicing-Dixit insipiens m corde suo, non est Sol.
105. Well, the sliding of the serpent, and the device of the serpent, we admit, come from the sun. The flight of the dove, and its harmlessness,-do they also ?

The flight,-yes, assuredly. The Innocence?-It is a new question. How of that? Between movement and non-movement-nay, between sense and non-sense-the difference rests, we say, in the power of Apollo; but between malice and innocence, where shall we find the root of that distinction?
106. Have you ever considered how much literal truth there is in the words-" The light of the body is the eye. If, therefore, thine eye be evil"-and the rest? How can the eye be evil? How, if evil, ean it fill the whole body with darkness?

What is the meaning of having one's body full of darkness? It cannot mean merely being blind. Blind, you may fall in the ditch if you move; but you may be well, if at rest. But to be evil-eyed, is not that worse than to have no eyes? and instead of being only in darkness, to have darkness in $u s$, portable, perfect, and eternal?
107. Well, in order to get at the meaning we may, indced, now appeal to physical science, and ask her to help us. How many manner of eyes are there? Yon physical-science students should be able to tell us painters that. We only know, in a vague way, the external aspect and expression of eyes. We see, as we try to draw the endlessly-grotesque creatures about us, what infinite variety of instruments they have; but you know, far bet-
ter than we do, how those instruments are constrieted and directed Yon know how some play in their soekets with independent revolution,-project into near-sightedness on pyramids of bone,-are brandished at the points of horns, -studded over backs and shoulders,-thrust at the ends of antennæ to pioneer for the head, or pinched up into tubercles at the corners of the lips. But how do the ereatures see out of all these eyes?
108. No business of ours, you may think? Pardon me. This is no Siren's question--this is altogether business of ours, lest, perehance, any of us should see partly in the same manner. Comparative sight is a far more important question than comparative anatomy. It is no matter, though we sometimes walk-and it may often be desirable to climb-like apes; but suppose we should ouly see like apes, or like lower ereatures? I can tell you, the science of optics is an essential one to us; for, exaetly according to these infinitely grotesque directions and multiplieations of instrument, you have correspondent, not only intelleetual but moral, faculty in the soul of the ereatures. Literally, if the eye be pure, the body is pure; but, if the light of the body be but darkuess, how great is that darkness!
109. Have you ever looked attentively at the study I gave you of the head of the rattlesnake? The serpent will keep its eyes fixed on you for an hour together, a vertical slit in each admitting such image of you as is poss'ble to the rattlesnake retina, and to the rattlesnake
mind. How much of you do you think it sees? I ask that, first, as a pure physical question. I do not know: it is not my business to know. You, from your schools of physical scicnce, should bring me answer. How much of a man can a snake see? What sort of image of him is received through that deadly vertical cleft in the iris;through the glazed blue of the ghastly lens? Make me a picture of the appearance of a man, as far as you can judge it can take place on the snake's retina. Then ask yourselves, farther, how much of speculation is possible to the snake, touching this human aspect?
110. Or, if that seem too far beneath possible inquiry, how say you of a tiger's eye, or a cat's? A cat may look at a king;-jes; but can it see a king when it looks at him? The beasts of prey never seem to me to look, in our sense, at all. Their eyes are fascinated by the motion of anything, as a kitten's by a ball;-they fasten, as if drawn by an inevitable attraction, on their food. But when a cat caresses you, it never looks at you. Its heart seems to be in its back and paws, not its eyes. It will rub itself against you, or pat you with velvet tufts instead of talons; but you may talk to it an hour together, yet not rightly catch its eye. Ascend higher in the races of being-to the fawn, the dog, the horse; you will find that, according to the clearness of sight, is indeed the kindness of sight, and that at least the noble eyes of humanity look through humanity, from heart into heart, and with no mechanical vision. And the Light of the body is
the eye-yes, and in happy life, the light of the heart also.
111. But now note farther: there is a mathematical power in the eye which may far transcend its moral power. When the moral power is feeble, the faculty of measurement, or of distinct delineation, may be supreme; and of comprehension none. But here, again, I want the help of the physical science schools. I believe the cagle has no scent, and hunts by sight, yet flies higher than any other bird. Now, I want to know what the appearance is to an eagle, two thousand feet up, of a sparrow in a hedge, or of a partridge in a stubble-field. What kind of definition on the retina do these brown spots take to manifest themselves as signs of a thing eatable; and if an eagle sees a partridge so, does it see everything else so? And then tell me, farther, does it see only a square yard at a time, and yet, as it flies, take summary of the square yards beneath it? When next you are travelling by express sixty miles an hour, past a grass bank, try to see a grasshopper, and you will get some idea of an eagle's optical business, if it takes only the line of ground underneath it. Does it take more ?
112. Then, besides this faculty of clear vision, you have to consider the faculty of metric vision. Neither an eagle, nor a Fingfisher, nor any other darting bird, can see things with both their eyes at the same time as completely as you and I can; but think of their faculty of measurement as compared with ours! You will find that it takes
you months of labour before you can acquire arcurate power, even of deliberate estimate of distances with the cye; it is one of the points to which, most of all, I have to direct your work. And the curious thing is that, given the degree of practice, yon will measure ill or well with the eye in proportion to the quantity of life in you. No one can measure with a glance, when they are tired. Only the other day I got half an inch out on a foot, in drawing merely a coat of arms, because I was tired. But fancy what would happen to a swallow, if it was half an inch out in a foot, in flying round a corner!
113. Well, that is the first branch of the questions which we want answered by optical science;-the actual distortion, contraction, and other modification, of the sight of different animals, as far as it can be known from the forms of their eyes. Then, secondly, we ourselves need to be taught the comection of the sense of colour with health; the difference in the physical conditions which lead us to seck for gloom, or brightness of hue; and the nature of purity in colour, first in the object seen, and then in the eye which prefers it.

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(The portion of lecture here omitted referred to illustrations of vulgarity and delicacy in colour, showing that the vulgar colonrs, even when they scemed most glaring, were in reality impure and dull; and destroyed each other by contention ; while noble colour, inteusely bright and pure,
was nevertheless entirely governed and calm, so that every colour bettered and aided all the rest.)
114. You recollect how I wrged you in my opening course of lectures rather to work in the school of crystalline colour than in that of shade.

Since I gave that first course of lectures, my sense of the necessity of this study of brightness primarily, and of purety and gaiety beyond all other qualities, has deeply been confirmed by the influence which the unclean horror and impious melancholy of the modern French schoolmost literally the school of death-has gained over the popular mind. I will not dwell upon the evil phrenzy today. But it is in order at once to do the best I can, in counteraction of its deadly influence, though not without other and constant reasons, that I give you heraldry, with all its splendonr and its pride, its brightness of colour, and hononrableness of meaning, for your main elementary practice.
115. To-day I lave only time left to press on your thoughts the deeper law of this due joy in colour and light.

On any morning of the year, low many pious supplications, do you suppose, are uttered thronghout edncated Europe for " light?" How many lips at least pronounce the word, and, perlaps, in the plurality of instances, with some distinct idca attached to it? It is true the speakers amploy it only as a metaphor. But why is their langnage thus metaphorical? If they mean merely to ask for
spiritual knowledge or guidance, why not say so plainly instead of usiug this jaded figure of speech? No boy goes to his father when he wants to be taught, or helped, and asks his father to give him ' light.' He asks what he wants, advice or protection. Why are not we also content to ask our Father for what we want, in plain Eng. lish?

The metaphor, you will answer, is put into our mouths, and felt to be a beautiful and necessary one.

I admit it. In your educational series, first of all examples of modern art, is the best engraving I could find of the picture which, founded on that idea of Christ's being the Giver of Light, contains, I believe, the most true and useful piece of religious vision which realistic art has yet embodied. But why is the metaphor so necessary, or, rather, how far is it a metaphor at all? Do you think the words 'Light of the World' mean only 'Teacher or Guide of the World?' When the Sun of Justice is aaid to rise with health in its wings, do you suppose the image only means the correction of error? Or does it even mean so much? The Light of Heaven is needed to dc that perfectly. But what we are to pray for is the Light of the World; nay, the Light " that lighteth every man that cometh into the world."
116. You will find that it is no metaphor--nor has it it ever been so.

To the Persian, the Greek, and the Christian, the sense of the power of the God of Light, has been one and
the same. That power is not merely in teaching or protecting, but in the enforcement of purity of body, and of equity or jnstice in the heart; and this, observe, not heavenly purity, nor final justice; but, now, and here, actual purity in the midst of the world's foulness,practical justice in the midst of the world's iniqnity. And the physical strength of the organ of sight,-the physical purity of the flesh, the actual love of sweet light and stainless colour,-are the necessary signs, real, inevitable, and visible, of the prevailing presence, with any nation, or in any bonse, of the "Light that lighteth every man that cometh into the world."
117. Physical purity;-actual love of swect light, and of fair colour. This is one palpable sign, and an entirely needful one, that we have got what we pretend to pray for every morning. That, yon will find, is the meaning of Apollo's war with the Python-of your own St. George's war with the dragon. You have got that battle stanped again on every sovereign in your pockets, but do you think the sovereigns are helping, at this instant, St. George in his battle? Once, on your gold of the Hemrys' times, you had St. Michacl and the dragon, and called your coins 'angels.' How much they have done lately, of angelic work, think you, in purifying the earth ?
118. Purifying, literally, purging and cleansing. That is the first "sacred art" all men have to learn. And the words I deferred to the close of this lecture, about the proposed improvements in Oxford, are very few. Oxford
is, indeed, capable of much improvement, but only by undoing the greater part of what has been done to it within the last twenty years; and, at present, the one thing that I would say to well-meaning persons is, ' Fo Heaven's sake-literally for Heaven's sake--let the place alone, and clean it.' I walked last week to Iffley-not having been there for thirty years. I did not know the church inside; I found it pitch-dark with painted glass of barbarous manufacture, and the old woman who showed it infinitely prond of letting me in at the front door instead of the side one. But close by it, not fifty yards down the hill, there was a little well-a holy well it should have been ; beantifnl in the recess of it, and the lovely ivy and weeds above it, had it but been cared for in a liuman way; but so full of frogs that you could not have dipped a cup in it without catching one.

What is the use of pretty painted glass in your churches when you have the plagues of Egypt outside of them?
119. I walked back from Iffley to Oxford by what was once the most beautiful approach to an academical city of any in Europe. Now it is a wilderness of obscure and base buildings. You think it a fine thing to go iuto Iffley church by the front door ;-and yon build cheap lodginghouses over all the approach to the chief nuiversity of English literature! That, forsooth, is your luminous cloister, and porch of Polygnotus to your temple of Apollo. And in the centre of that temple, at the very
cot of the dome of the Radclyffe, between two principal :olleges, the lane by which I walked from my own colege half an hour ago, to this place,-Brasen-nose Lane,s left in a state as loathsome as a back-alley in the East nd of London.
120. These, I suppose are the signs of extending liberlity, and disseminated advantages of education.
Gentlemen, if, as was lately said by a leading member If your Government, the function of a university be only o examine, it may indeed examine the whole mob of Ingland in the midst of a dunghill; but it cannot teach he gentlemen of England in the midst of a dunghill ; no, $10 r$ even the people of England. How many of her peole it ought to teach is a question. We think, now-a-days, ur philosophy is to light every man that cometh into the vorld, and to light every man equally. Well, when indeed rot give up all other commerce in this island, and, as in 3acon's New Atlantis, ouly buy and sell to get God's first reature, which was light, there may be some equality of yain for us in that possession. But until then,-and we re very far from such a time, -the light cannot be given o all men equally. Nay, it is becoming questionable phether, instead of being equally distributed to all, it may tot be equally withdrawn from us all: whether the ideas f purity and justice,-of loveliness which is to sanctify ur peace,-and of justice which is to sanctify our battle, re not vanishing from the purpose of our policy, and ven from the conception of our education.

The uses, and the desire, of seclusion, of meditation, of restraint, and of correction-are they not passing from us in the collision of worldly interests, and restless contests of mean hope, and meaner fear? What light, what health, what peace, or what security,-youths of Englanddo you come here now to seek? In what sense do you receive-with what sincerity do you adopt for yourselvesthe ancient legend of your schools, "Dominus illuminatio mea, et salus mea; quem timebo?"
121. Remember that the ancient theory on which this university was founded,-not the theory of any one founder, observe, nor even the concluded or expressed issue of the wisdom of many; but the tacit feeling by which the work and hope of all were united and completed-was, that England should gather from among her children a certain number of purest and best, whom she might train to become, each in their day of strength, her teachers and patterns in religion, her declarers and doers of justice in law, and her leaders in battle. Bred, it might be, by their parents, in the fond poverty of learning, or amidst the traditions and discipline of illustrious houses,-in either manner separate, from their youth up, to their glo rious offices-they came here to be kindled into the lights that were to be set on the hills of England, brightest of the pious, the loyal, and the brave. Whatever corruption blighted, whatever worldliness buried, whatever sin pol lated their endeavour, this conception of its meaning remained; and was indeed so fulfilled in faithfulness, that
to the men whose passions were tempered, and whose hearts confirmed, in the calm of these holy places, you, now living, owe all that is left to you of hope in heaven, and all of safety or honour that you lave to trust and defend on earth.

Their children have forfeited, some by guilt, and many iu folly, the leadership they inherited; and every man in England now is to do and to learn what is right in his own eyes. How much need, therefore, that we should learn first of all what eyes are; and what vision they ought to possess-science of sight granted only to clearness of soul; but granted in its fulness even to mortal eyes: for though, after the skin, worms may destroy their body, happy the pure in heart, for they, yet in their flesh, shall see the Light of Heaven, and know the will of God.

## LECTURE VII.

> THE RELATION TO ART OF THE SCIENOES OF INORGANIO FORM.

February 29th, 1872.
122. I DD not wish in my last lecture, after I had directed your attention to the special bearing of some of the principles I pleaded for, to euforce upon you any farther general conclusions. But it is necessary now to collect the gist of what I endeavoured to show yon respecting the organs of sight; namely, that in proportion to the physical perfectuess or clearness of them is the degree in which they are raised from the perception of prey to the perception of beanty and of affection. The imperfect and brutal instrument of the eye may be vivid with malignity, or wild with hunger, or manifoldly detective with microscopic exaggeration, assisting the ingenuity of insects with a multiplied and permanent monstrosity of all things round them ; but the noble himan sight, careless of pres, disdainfnl of minnteness, and reluctant to anger, becomes clear in gentleness, prond in reverence, and joyful in love. And finally, the physical splendour of light and colour, so far from being the perception of a mechanical force by a mechanical instrument, is an entirely spiritual conscions.
ness, accurately and absolutely proportioned to the purity of the moral nature, and to the force of its natural and wise affections.
123. That was the sum of what I wished to show you in my last lecture; and observe, that what remains to mo doubtful in these things,-and it is much-I do not trouble you with. Only what I know that on experiment you can ascertain for yourselves, I tell you, and illustrate, for the time, as well as I can. Experiments in art are difficult, and take years to try; you may at first fail in them, as you might in a chemical analysis ; but in all the finatters which in this place I shall urge on your attention I can assure you of the final results.

That, then, being the sum of what I could tell you with certainty respecting the methods of sight, I have next to assure you that this faculty of sight, disciplined and pure, is the only proper faculty which the graphic artist is to use in his inquiries into nature. His office is to show her appearances; his duty is to know them. It is not his daty, though it may be sometimes for his convenience, while it is always at his peril, that he knows more; -knows the causes of appearances, or the essence of the things that produce them.
124. Once again, therefore, I must limit my application of the word science with respect to art. I told you that I did not mean by 'science' such knowledge as that triangles on equal bases and betwecn parallels are equal, but such knowledge as that the stars in Cassiopeia are in
the form of a W. But, farther still, it is not to be considered as science, for an artist, that they are stars at all. What he has to know is that they are luminous points which twinkle in a certain manner, and are pale yellow, or cleep yellow, and may be quite deceptively imitated at a certain distance by brass-headed nails. This he ought to know, and to remenber accurately, and his art knowledge-the science, that is to say-of which his art is to be the reflection, is the sum of knowledges of this sort; his memory of the look of the sun and moon at such and such times, through such and such clouds; his memory of the look of mountains,-of the look of sea,-of the look of human faces.
125. Perhaps you would not call that 'science' at all. It is no matter what either you or I call it. It is science of a certain order of facts. Two summers ago, looking from Verona at sunset, I saw the mountains beyond the Lago di Garda of a strange blue, vivid and rich like the bloom of a damson. I never saw a mountain-blue of that particular quality before or since. My science as an artist consists in my knowing that sort of blue from every other sort, and in my perfect recollection that this particular blue had such and such a green associated with it in the near fields. I have nothing whatever to do with the atmospheric canses of the colour : that knowledge would merely occupy my brains wastefully, and warp my artistic attention and energy from their point. Or to take a simpler instance yet: Turner, in lis early life, was some-
times good-natured, and wo:ld slow people what he was about. He was one day makng a drawing of Plymouth harbour, with some ships at the distance of a mile or two, seen against the light. Having shown this drawing to a naval officer, the naval officer observed with surprise, and objected with very justifiable indignation, that the ships of the line had no port-holes. "No," said Turner, "certannly not. If you will walk up to Mount Edgecumbe, and look at the ships against the sunset, you will find you can't see the port-holes." "Well, but," said the naval officer, still indignant, " you know the port-holes are there." "Yes," said Turner, "I know that well enough ; but my business is to draw what I sce, and not what I know is there."
126. Now, that is the law of all fine artistic work whatsoever; and, more than that, it is, on the whole, perilous to your, and undesirable, that you should know what is there. If, indeed, you have so perfectly disciplined your sight that it cannot be influenced by prejudice;-if you are sure that none of your knowledge of what is there will be allowed to assert itself ; and that you can reflect the ship as simply as the sea beneath it does, though you may know it with the intelligence of a sailor,--then, indeed, you may allow yourself the pleasure, and what will sometimes be the safeguard from error, of learning what ships, or stars, or mountains, are in reality; but the ordinary powers of liuman perception are almost certain to be disturbed by the knowledge of the real nature of
what they draw : and, until you are quite fearless of your faithfulness to the appearances of things, the less you know of their reality the better.
127. And it is precisely in this passive and naïve simplicity that art becomes, not only greatest in herself, but most useful to science. If she knew anything of what she was represeiting, she would exhibit that partial knowledge with complacency; and miss the points beside it, and beyond it. Two painters draw the same mountain; the one has got unluckily into his head some curiosity about glacier marking; and the other has a theory of cleavage. The one will scratch his mountain all over; --the other split it to pieces; and both drawings will be equally useless for the purposes of honest science.
128. Any of you who chance to know my books cannot but be surprised at my saying these things; for, of all writers on art, I suppose there is no one who appeals so often as I do to physical science. But observe, I appeal as a critic of art, never as a master of it. Turner made drawings of mountains and clouds which the public said were absurd. I said, on the contrary, they wore the ouly true drawings of monntains and clouds ever made jet: and I proved this to be so, as only it could be proved, by steady test of physical science: but Turner had drawn his mountains rightly, long before their structure was known to any geologist in Europe; and has painted per. fectly truths of anatomy in clouds which I challenge any metenrologist in Europe to explain at this day.
129. And indeed I was obliged to leave Modern Painters incomplete, or, rather, as a mere sketch of intention, in analysis of the forms of cloud and wave, because I had not scientific data enongh to appeal to. Just refleet for an instant how absolutely whatever has been done in art to represent these most familiar, yet most spectral forms of cloud-utterly inorganic, yet, by spiritual ordinance, in their kindness fair, and in their anger frightful,-how all that has yet been done to represent them, from the undulating bands of blue and white which give to heraldry its nebule bearing, to the finished and deceptive skies of Turner, has been done without one syllable of help from the lips of science.*
130. The rain which flooded our fields the Sunday before last, was followed, as you will remember, by bright days, of which Tuesday the 20th was, in Loudon, notable for the splendour, towards the afternoon, of its white cumulus clouds. There has been so much black east wind lately, and so much fog and artificial gloom, besides, that I find it is actnally some two years since I last saw a noble cumulus clond under full light. I chanced to be standing under the Victoria Tower at Westminster, when

[^6]the largest mass of them floated past, that day, from the north-west; and I was more impressed than ever yet by the awfulness of the cloud-form, and its unaccountableness, in the present state of our knowledge. The Victoria Tower, seen against it, had no magnitude: it was like looking at Mont Blanc over a lamp-post. The domes of cloud-snow were heaped as definitely; their broken flanks were as grey and firm as rocks, and the whole mountain, of a compass and height in heaven which only became more and more inconceivable as the eye strove to ascend it, was passing behind the tower with a steady march, whose swiftness must in reality have been that of a tempest: yet, along all the ravines of vapour, precipice kept pace with precipice, and not one thrust another.
131. What is it that hews them out? Why is the blue sky pure there,-cloud solid here; and edged like marble; and why does the state of the blue sky pass into the state of cloud, in that calm advance?

It is true that you can more or less imitate the forms of elond with explosive vapour or steam; but the steam melte instantly, and the explosive vapom dissipates itself. The cloud, of perfect form, proceeds unehanged. It is not an explosion, but an enduring and advancing presence. The more you think of it, the less explicable it will become to you.
132. That this should yet be mexplained in the king: dom of the air is, however, no marvel, since aspeets of a simpler kind are unexplained in the earth. which we
tread, and in the water which we drink and wash with. You seldom pass a day withont receiving some pleasure from the cloudings in marble; can you explain how the stone was clouded? You certainly do not pass a day without washing your hands. Can you explain the frame of a soap-bubble?
133. I have allowed myself, by way of showing at once what I wanted to come to, to overlook the proper arrangement of my subject, and I must draw back a little.

For all his own purposes, merely graphic, we say, if an artist's eye is fine and faithful, the fewer points of science he has in his head, the better. But for purposes more than graphic, in order that he may feel towards things as he should, and choose them as we should, he ought to know something about them ; and if he is quite sure that he can receive the science of them without letting himself become uncandid and narrow in observation, it is very desirable that he should be acquainted with a little of the alphabet of structure,-just as much as may quicken and certify his observation, without prejudicing it. Cantivusly, therefore, and receiving it as a perilous indulgence, he may venture to learn, perhaps, as much astronomy as may prevent his carelessly putting the new moon wrong side upwards; and as much botany as will prevent him from confusing, which I ain sorry to say Turner did, too often, Scotch firs with stone pines. He may concede so much to geology as to choose, of two equally picturesque views, one that illustrates rather than conceals the
structure of a crag: and perhaps, once or twice in his life, a portrait painter might advantageously observe how uulike a skull is to a face. And for you, who are to use your drawing as one element in general education, it is desirable that physical science should assist in the attainment of truth which a real painter seizes by practice of ere.
134. For this purpose I shall appeal to your masters in science to furnish us, as they have leisure, with some simple and readable accounts of the structure of things which we have to draw continnally. Such scientific accounts will not usually mach help us to draw them, but will make the drawing, when done, far more valuable to us.

I have told you, for instance, that nobody-at least, no painter-can at present explain the structure of a bubble. To know that structure will not help you to draw sea-foam, but it will make you look at sea-foam with greater interest.

I am not able now to watch the course of modern science, and may perhaps be in error in thinking that the frame of a bubble is still unexplained. But I have not jet met by any chance, witl an account of the forces which, under concussion, arrange the particles of a fluid into a globular film; though, from what I know of cohesion, gravity, and the nature of the atmosphere, I can make some shift to guess at the kind of action that takes place in forming a single bubble. But how one bubble
absorbs another without breaking it; or what exact methods of tension prepare for the change of form, and establish it in an instant, I am utterly at a loss to conceive.

Here, I think, then, is one familiar matter which, up to the possible point, science might condescendingly interpret for us. The exhaustion of the film in preparation for its change; the determination of the smaller bubble to yield itself up to the larger; the instantaneons flash into the new shape, and the swift adjnstment of the rectangnlar lines of intersection in the marvellous vaulting-all this I want to be explained to us, so that, if we cannot understand it altogether, we may at least know exactly how far we do, and how far we do not.
135. And, next to the laws of the formation of a bubble, I want to see, in simple statement, those of the formation of a bottle. Namely, the laws of its resistance to fracture, from without and within, by concussion or explosion; and the due relations of form to thickness of material ; so that, putting the problem in a constant form, we may know, out of a given quantity of material, how to make the strongest bottle under given limitations as to shape. For instance,-you have so much glass given you: your bottle is to hold two pints, to be flat-bottomed, and so narrow and long in the neck that you can grasp it with your hand. What will be its best ultimate form?
136. Probably, if you thonght it courteous, you would laugh at me just now; and, at any rate, are thinking to yourselves that this art problem at least needs no scien-
tific investigation, having been practically solved, long ago, by the imperative human instinct for the preservation of bottled stout. But you are only feeling now, gentlemen, and recognizing in one instance, what I tell you of all. Every scientific investigation is, in the same sense as this wonld be, useless to the trained master of any art. To the soap-bubble blower, and glass-blower,--to the potmaker and bottle maker,-if dexterous craftsmen, your science is of no account; and the imp of their art may be imagined as always looking triumphantly and contemptuously, out of its successfully-produced bottle, on the vain analysis of centrifugal impulse and inflating breath.
137. Nevertheless, in the present confusion of instinct and opinion as to beautiful form, it is desirable to have these two questions more accurately dealt with. For observe what they branch into. The coloured segments of globe out of which form is constitated, are portions of spherical vaults constructed of fluent particles. You cannot have the primeiples of spherical vanlting put in more abstract terms.

Then considering the arch as the section of a vault, the greater number of Gothic arches may be regarded as the intersections of two spherical vaults.

Simple Gothic foliation is merely the triple, quadruple, or rariously multiple repetition of such intersection.

And the beanty-(observe this carefully)-the beanty of Gothic arches, and of their foliation, always involves reference to the strength of their structure ; but only to
therr structure as self-sustaining; not as sustaining superincumbent weight. In the most literal of senses, "the earth hath bubbles as the water hath; and these are of them."
138. What do yon think made Michael Angelo look back to the dome of Santa Maria del Fiore, saying, "Like thee I will not build one, better than thee I cannot?" To you or to me there is nothing in that dome different from hundreds of others. Which of you, who have been at Florence, can tell me honestly he saw anything wonderful in it? But Michael Angelo knew the exact proportion of thickness to weight and curvature which enabled it to stand as securely as a mountain of adamant, though it was only a film of clay, as frail, in proportion to its bulk, as a sea-shell. Over the massy war towers of the city it floated ; fragile, yet without fear. "Better than thee I cannot."
139. Then think what the investigation of the bottle branches into, joined with that of its, pecessary companion, the cup. There is a sketch for you of the cup of cups, the pure Greek $\kappa$ áv $\theta a \rho o s$, which is always in the hand of Dionusos, as the thunderbolt is in that of Zeus. Learn but to draw that thoroughly, and you won't have mnch more to learn of abstract form ; for the investigation of the kinds of line that linit this will lead you into all the practical geometry of nature; the ellipses of her sea-bays in perspective; the parabolas of her waterfalls and fountains in profile; the catenary curves of their fall-
ing festoons in front; the infinite variety of accelerated or retarded curvature in every condition of mountain debris. But do you think mere science can measure for you any of these things? That book on the table is one of the four volumes of Sir William Hamilton's Greek Vases. He has measured every important vase vertically and horizontally, with precision altogether admirable, and which may, I hope, induce you to have patience with me in the much less complex, though even more scrupulous, measurements which I shall require on my own examples. Yet English pottery remains precisely where it was, in spite of all this investigation. Do you fancy a Greek workman ever made a vase by measurement? He dashed it from his hand on the wheel; and it was beautiful: and a Venetian glass-blower swept you a curve of crystal from the end of his pipe; and Reynolds or Tintoret swept a curve of colour from their pencils, as a musician the cadence of a note, unerring, and to be measured, if you please, afterwards, with the exactitude of Divine law.
140. But, if the truth and beauty of art are thus beyond attainment by help of science, how much more its invention? I must defer what I have chiefly to say on this head till next lecture; but to-day I can illustrate, simply, the position of invention with respect to science in oue very important group of inorganic forms--hose of drapery.
141. If you throw at random over a rod, a piece of drapery of any material which will fall into graceful
folds, you will get a series of sinuous folds in catenary curves: and any given disposition of these will be nearly as agreeable as any other; though, if you throw the stuff on the rod a thousand times, it will not fall twice alike.
142. But suppose, instead of a straight rod, you take a beautiful nude statue, and throw the piece of linen over that. You may encumber and conceal its form altogether; you may entirely conceal portions of the limbs, and show others; or you may leave indications, under the thin veil, of the contours which are hidden; but in ninety-nine cases out of a hundred you will wish the drapery taken off again; you will feel that the folds are in some sort discrepant and harmful, and eagerly snatch them away. However passive the material, however softly accommodated to the limbs, the wrinklings will always look foreign to the form, like the drip of a heavy shower of rain falling off it, and will load themselves in the hollows uncom. fortably. You will have to pull them about ; to stretch them one way, loosen them in another, and supply the quantity of government which a living person would have given to the dress, before it becomes at all pleasing to yon.
143. Doing your best, you will still not succeed to your mind, provided you have, indeed, a mind worth pleasing. No adjnstment that you can make, on the quiet figure, will give any approximation to the look of drapery which has previously accommodated itself to the action which brought the figure into the position in which it stays. On
a really living person, gracefully dressed, and who has paused from graceful motion, you will get, again and again, arrangements of fold which yon can admire: but they will not remain to be copied, the first following movement alters all. If you had your photographic plate ready and could photograph-I don't know if it has been tried-girls, like waves, ${ }^{2}$ they move, you would get what was indeed lovely; and yet, when you compared even such results with fine sculpture, you would see that there was something wanting ;--that, in the deepest sense, all was yet wanting.
144. Yet this is the most that the plurality of artists can do, or think of doing. They draw the mude figure with careful anatomy; they put their model or their lay figure into the required position; they arrange draperies on it to their mind, and paint them from the reality. All such work is absolutely valueless,-worse than valueless in the end of it, blinding us to the qualities of fine work.

In true design it is in this matter of drapery as in all else. There is not a fold too much, and all that are given aid the expression, whether of movement or character. Here is a bit of Greek sculpture, with many folds; here is a bit of Christian scnlpture with few. From the many, not one could be removed without harm, and to the few, not one could be added. This alone is art, and no science will ever enable you to do this, but the poetis and fabric instincts only.
145. Nevertheless, however far above science, your
work must comply with all the requirements of science. The first thing you have to ask is, Is it scientifically right? That is still nothing, but it is essential. In modern imitations of Gothic work the artists think it religious to be wrong: and that Heaven will be propitious only to saints whose stoles or petticoats stand or fall into incredible angles.

All that nonsense I will soon get well out of your heads by enabling you to make accurate studies from real drapery, so that you may be able to detect in a moment whether the folds in any design are natural and true to the form, or artificial and ridiculous.
146. But this, which is the science of drapery, will never do more than guard you in your first attempts in the art of it. Nay, when once you have mastered the elements of such science, the most sickening of all work to you will be that in which the draperies are all right,and nothing else is. In the preseut state of our schools one of the chief mean merits against which I shall have to warn you is the imitation of what milliners admire: nay, in many a piece of the best art I shall have to show you that the draperies are, to some extent, intentionallv inl-done, lest you should look at them. Yet, throngh cvery complexity of desirableness, and counter-peril, hold to the constant and simple law I hare always given you-that the best work must be right in the beginning, and lovely in the end.
147. Finally, observe that what is true respecting these
simple forms of drapery is true of all other inarganc form. It must become organie under the artist's han, ${ }^{\text {T }}$ by his invention. As there must not be a fold in a vestment too few or too many, there must not, in noble landscape, be a fold in a mountain, too few or too many. As you will never get from real linen cloth, by copying it ever so faithfully, the drapery of a noble statue, so you will never get from real mountains, eopy them never so faithfully, the forms of noble landscape. Anything more beautiful than the photographs of the Valley of Chamouni, now in your print-seller's' windows, cannot be conceived. For geographical and geological purposes they are worth anything; for art purposes, worth-a good deal less than zero. You may learn much from them, and will mislearn more. But in Turner's "Valley of Chamouni" the mountains lave not a fold too much, nor too little. There are no such mountains at Chamouni: they are the ghosts of eternal mountains, sueh as have been, and shall be, for evermore.
148. So now in sum, for I may have confused you by illustration,-
I. You are, in drawing, to try only to represent the appearances of things, never what you know the things to be.

I1. Those appearances you are to test by the appliance of the scientific laws relating to aspect; and to learn, by
accurate measurement, and the most fixed attention, to represent with absolute fidelity.
III. Having learned to represent actual appearances faithfully, if you have any human faculty of your own, visionary appearances will take place to you which will be nobler and more true than any actual or material appearances; and the realization of these is the function of every fine art, which is founded absolutely, therefore, in truth, and consists absolutely in imagination. And once more we may conclude with, but now nsing them in a deeper sense, the words of our master-" The best in this kind are but shadows."

It is to le our task, gentlemen, to endeavour that they may be at leas: so much.

## LECTURE VIII.

TAE RELATION TO ART OF THE SCIENCES OF ORGANIC FORM.

## Mar:/h 2nd, 1872.

149. I hate next in order to speak of the relation of art to science, in dealing with its own principal subjectorganic form, as the expression of life. And, as in my former lecture, I will tell you at once what I wish chiefly to enforce upon you.

First,--but this I shall have no time to dwell upon,That the true power of art must be founded on a general knowledge of organic nature. not of the human frame only.

Secondly.-That in representing this organic nature, quite as much as in representlng inanimate things, Art has nothing to do with structures, causes, or absolute facts; but only with appearances.

Thirdly.-That in representing these appearances, she is more hindered than helped by the knowledge of things which do not externally appear; and therefore, that the siudy of anatomy generally, whether of plants, animals, or man, is an impediment to graphic art.

Fourthly.-That especially in the treatment and conception of the human form, the habit of contemplating
its anatomica. structure is not only a lindrance, but a degradation; and farther yet, that even the study of the external form of the human body, more exposed than it may be healthily and decently in daily life, has been essentially destructive to every school of art in which it has been practised.
150. These four statements I undertake, in the course of our future study, gradually to confirm to yon. In a single lecture I , of course, have time to do little more than clearly state and explain them.

First, I tell you that art should take cognizance of all living things, and know them, so as to be able to name, that is to say, in the truest distinctive way, to describe them. The Creator daily brings, before the noblest of His creatures, every lower creature, that whatsoever. Man calls it, may be the name thereof.

Secondly.-In representing, nay, in thinking of, and caring for, these beasts, man has to think of them essentially with their skins on them, and with their sonls in them. He is to know how they are spotted, wrinkled, furred, and feathered; and what the look of them is, in the eyes; and what grasp, or cling, or trot, or pat, in their paws and claws. He is to take every sort of view of them, in fact, except one,-the Butcher's view. He is never to think of them as bones and meat.

Thirdly.-In the representation of their appearance, the knowledge of bones and meat, of joint and muscle, is more a hindrance than a help.

Lastly-With regard to the human form, such knowledge is a degradation as well as a hindrance; and even the study of the nude is injurious, beyond the limits of honour and decency in daily life.

Those are my four positions. I will not detain you by dwelling on the first two-that we should know every sort of beast, and know it with its skin on it, and its soul within it. What you feel to be a paradox-perhaps you think an incredible and insolent paradox-is my telling you that you will be hindered from doing this by the study of anatomy. I address myself, therefore, only to the last two points.
151. Among your standard engravings, I have put that of the picture by Titian, in the Strozzi Palace, of a little . Strozzi maiden feeding her dog. I am going to put in the Rudimentary Series, where you can always get at it (R. 125), this much more delightful, though not in all points standard, picture by Reynolds, of an infant danghter of George the Third's, with her Skye terrier.

I have no doubt these dogs are the authentic pets, given in as true portraiture as their mistresses; and that the little Princess of Florence and Princess of England were both shown in the company which, at that age, they best liked;-the elder feeding her favourite, and the baby with her arms about the neck of hers.

But the custom of putting either the dog, or some inferior animal, to be either in contrast, or modest
companionslip, with the nobleness of human form and thought, is a piece of what may be called mental com parative anatomy, which has its beginning very far back in art indeed. One of quite the most interesting Greek vases in the British Museum is that of which the painting long went under the title of "Anacreon and his Dog." It is a Greek lyric poet, singing with lifted head, in the action given to Orpheus and Philammon in their moments of lighest inspiration ; while, entirely unaffected by, and superior to the music, there walks beside him a sharpnosed and curly-tailed dog, painted in what the exclusive admirers of Greek art would, I suppose, call an ideal manner ; that is to say, his tail is more like a display of fireworks than a tail ; but the ideal evidently founded on the material existence of a charming, though supercilious animal, not unlike the one which is at present the chief solace of my labours in Oxford, Dr. Acland's dog Bustle. I might go much farther back than this; but at all events, from the time of the golden dog of Pandareos, the fawn of Diana, and the eagle, owl and peacock of the great Greek gods, you find a succession of animal typescentralized in the Middle Ages, of course, by the hound and the falcon-used in art either to symbolize, or contrast with, dignity in human persons. In modern portraiture, the custom has become vulgarized by the anxiety of everybody who sends their picture, or their children's, to the Royal Academy, to have it demonstrated to the public by the exhibition of a pony, and a dog with a whip
in its mouth, that they live, at the proper season, in a country house. But by the greater masters the thing is done always with a deep sense of the mystery of the cornparative existences of living ereatures, and of the methods of viee and virtue exhibited by them. Albert Dürer searcely ever draws a seene in the life of the Virgin, without putting into the foreground some idle cherubs at play with rabbits or kittens; and sometimes lets his love of the grotesque get entirely the better of him, as in the engraving of the Madonna with the monkey. Veronese disturbs the interview of the queen of Sheba with Solomon, by the petulance of the queen of Sheba's Blenheim spaniel, whom Solomon has not treated with sufficient respect; and when Veronese is introduced himself, with all his family, to the Madonna, I am sorry to say that his own pet dog turns its back to the Madonna, and walks ont of the room.
152. But among all these symbolic playfulnesses of the higher masters, there is not one more perfect than this study by Reynolds of the infant English Princess with her wire-haired terrier. He has put out his whole strength to show the infinite differences, yet the blessed harmonies, between the human and the lower nature. First, having a blue-eyed,* soft baby to paint, he gives its full face, as round as may be, and rounds its eyes to complete openness, because somebody is coming whom it does not know.

[^7]But it opens its eyes in quiet wonder, and is not disturbed, but behaves as a princess should. Beside this soft, serenely-minded baby, Reynolds has put the ronghest and roughest-minded dog he could think of. Instead of the full round eyes, you have only the dark places in the hair where you know the terrier's eyes must be-sharp enough, if you conld see them-and very certainly seeing you, but not at all wondering at you, like the baby's. For the terrier has instantly made up his mind about you; and above all, that you have no business there ; and is growling and snarling in his fiercest manner, thongh without moving from his mistress's side, or from under her arm. You have thus the full contrast between the grace and true charm of the child, who "thinketh no evil" of yon, and the uncharitable narrowness of nature in the grown-up dog of the world, who thinks nothing but evil of you. But the dog's virtue and faithfulness are not told less clearly; the baby evidently uses the creature just as much for a pillow as a playmate;-buries its arm in the rough hair of it with a loving confidence, half already converting itself to protection: and baby will take care of dog, and dog of baby, throngh all chances of time and fortune.
153. Now the exquisiteness with which the painter has applied all his skill in composition, all his dexterity in tonch of pencil, and all his experience of the sources of expression, to complete the rendering of his comparison. cannot, in any of the finest snbtleties of it, be explained;
but the first steps of its science may be easily traced; and with little pains you may see how a simple and large mass of white is opposed to a rugged one of grey; how the child's face is put in front light, that no shadow may detract from the brightness which makes her, as in Arabian legends, "a princess like to the full moon"-how, in this halo, the lips and eyes are brought out in deep and rich colour, while scarcely a gleam of reflection is allowed to disturb the quietuess of the eyes;-(the terrier's, you feel, would glitter enough, if yon conld see them, and flash back in shallow fire; but the princess's eyes are thinking, and do not flash;)-how the quaint cap surrounds, with its not wholly painless formalism, the courtly and pationt face, opposed to the rugged and undrused wild onc; and how the easy grace of soft lim's and rounded neck are cast, in repose, agaiust the uneasily gathered up crouching of the short legs, and petulant shrig of the eager shoulders, in the ignobler creature.
154. Now, in his doing of all this, Sir Joshua was thinking. of, and seeing, whatever was best in the creatures, within and without. Whatever was most perfectly doggish -perfectly childish--in soul and body. The absolute truth of outer aspect, and of inner mind, he seizes infallibly; but there is one part of the creatures which he never, for an instant, thinks of, or cares for,-their bones. Do you suppose that, from first to last, in painting such a picture, it would ever enter Sir Joshua's mind to think what a dog's skull would look like, beside a baby's? The quite essential facte
to him are those of which the skull gives no informationthat the baby has a flattish pink nose, and the dog a bossy black one. You might dissect all the dead dogs in the water supply of London without finding out what, as a painter, it is here your only business precisely to know,what sort of shininess there is on the end of a terrier's nose ; and for the position and action of the creatures, all the four doctors together, who set Bustle's leg for him the other day, when he jumped out a two-pair-of-stairs window to bark at the volunteers, could not have told Sir Joshua how to make his crouching terrier look ready to snap, nor how to throw the child's arm over its neck in cornplete, jet not languid, rest.
155. Sir Joshua, then, does not think of, or care for, anatomy, in this picture; but, if he had, would it lave done him harm? You may easily see that the child's limbs are not drawn with the precision that Mantegna, Dürer, or Michael Angelo would have given them. Would some of their science not have bettered the picture?

I can show you exactly the sort of influence their science would have had.

In your Rudimentary Series, I have placed in sequence two of Dürer's most celebrated plates, (R. 65, R. 66,) the coat of arms with the skull, aud the Madouna crowned by angels; and that you may see precisely what qualities are, and are not, in this last, I have enlarged the head by photography, and placed it in your Reference Series (117). You will find the skull is perfectly understord,
and exquisitely engraved, but the face, imperfectly uriderstood and coarsely engraved. No man who had studied the skull as carefully as Dürer did, ever could engrave a face beautifully, for the perception of the bones continually thrusts itself upon him in wrong places, and in trying to conquer or modify it, he distorts the flesh. Where the featurcs are marked, and full of character, he can quit himself of the impression; but in the rounded contour of women's faces he is always forced to think of the skull; and even in his ordinary work often draws more of bones and hair, than face.
156. I could easily give you more definite, but very disagreeable, proofs of the evil of knowing the anatomy of the human face too intimately: but will rather give you further evidence by examining the skull and face of the creature who has taught us so much already,-the eagle.

Here is a slight sketch of the skull of the golden eagle. It may be interesting to you sometimes to make such drawings ronghly, for the sake of the points of mechanical arrangement-as here in the circular bones of the eye-socket; but don't snppose that drawing these a million of times over will ever hely you in the least to draw an eagle itself. On the contrary, it would almost to a certainty linder you from noticing the essential point in an eagle's head-the projection of the brow. All the main work of the eagle's eye is, as we saw, in looking down. To keep the sunshine above from teasing it, the
eye is put under a triangular penthouse, which is pre cisely the most eharacteristic thing in the bird's whole aspect. Its hooked beak does not materially distinguish it from a cockatoo, but its hooded eye does. But that projection is not accounted for in the skull; and, so little does the anatomist care about it, that you may hunt through the best modern works on ornithology; and you will find eagles drawn with all manner of dissections of skulls, claws, clavicles, sternums, and gizzards; but you won't find so much as one poor falcon drawn with a falcon's eye.
157. But there is another quite essential point in au eagle's head, in comprehending which, again, the skull will not help us. The skull in the human creature fails in three essential points. It is eyeless, noseless, and lipless. It fails only in an eagle in the two points of eye and lip; for an eagle has no nose worth mentioning; his beak is only a prolongation of his jaws. But he has lips very much worth mentioning, and of which his skull gives no account. One misses them much from a hinman skull: -"Here hung those lips that I have kissed, I know not how oft,"-but from an eagle's you miss them more, for he is distinct from other birds in having with his own eagle's eye, a dog's lips, or very nearly such; an eutirely fleshy and riugent mouth, bluish pink, with a perpetual grin upon it.

So that if you look, not at his skull, but at him, attentively enough, you will precisely get Æschylus's notion of
him, essential in the Greek mind- $\pi \tau \eta \nu \grave{s} \kappa$ кún $\delta a \phi o \iota \nu \grave{s}$ aietòs-and then, if you want to see the use of his beak or bill, as distinguished from a dog's teeth, take a drawing from the falconry of the middle ages, and you will see how a piece of flesh becomes a rag to him, a thing to tear
 precisely, in a falcon I got out of Mr. Coxe's favourite fourteenth century missal.

Now look through your natural history books from end to end; see if you can find oue drawing, with all their anatomy, which shows you either the eagle's eje, his lips, or this essential use of his beak, so as to enable you thoroughly to understand those two lines of Wschylus: then, look at this Greek eagle on a coin of Elis, R. 50, and this Pisan one, in marble, Edu. 131, and you will not doubt any more that it is better to look at the living birds, than to ent them to pieces.
158. Anatomy, then,-I will assume that you grant, for the moment, as I will assuredly prove to you eventually, -will not help us to draw the true appearances of things. But may it not add to our intelligent conception of their nature?

So far from doing this, the anatomical study which has, to our much degradation and misfortune, usurped the place, and taken the name, at once of art and of natural history, has produced the most singularly mischievous offect on the faculty of delineation with respect to different races of auimals. In all recent books on natura.
history, you will find the ridiculous and ugly creatures done well, the noble and beautiful creatures done, I do not say merely ill, but in no wise. Yon will find the law hold miversally that apes, pigs, rats, weasels, foxes, and the like,-but especially apes,-are drawn admirably; but not a stag, not a lamb, not a horse, not a lion;the nobler the creature, the more stupidly it is always drawn, not from feebleness of art power, but a far deadlier fanlt than that-a total want of sympathy with the noble qualities of any creature, and a loathsome delight in their disgusting qualities. And this law is so thoronghly carried out that the great French historian of the mammalia, St. Hilaire, chooses, as his single example of the highest of the race, the most nearly bestial type he can find, human, in the world. Let no girl ever look at the book, nor any youth who is willing to take my word; let those who doubt me, look at the example he has given of womankind.
159. But admit that this is only French anatomy, or illstuclied anatomy, and that, rightly studied, as Dr. Acland, for instance, would teach it us, it might do us some kind of good.

I must reserve for my lectures on the school of Florence any analysis of the effect of anatomical study on European art and character; yon will find some notice of it in my lecture on Michael Angelo; and in the course of that analysis, it will be necessary for me to withdraw the statement made in the Stones of Venice, that anatomical
science was helpful to great men, though harmful to mean ones. I am now certain that the greater the intellect, the more fatal are the forms of degradation to which it becomes liable in the course of anatomical study: and that to Michael Angelo, of all men, the mischief was greatest, in destroying his religions passion and imagination, and leading him to make erery spiritual conception subordinate to the display of his knowledge of the body. To-day, however, I only wish to give you my reasons for withdrawing anatomy from your course of study in these schools.
160. I do so, first, simply with reference to our time, convenience, and systematic method. It has become a habit with drawing-masters to confuse this particular science of anatomy with their own art of drawing, though they confuse no other science with that art. Admit that, in order to draw a tree, you should have a knowledge of botany: Do yon expect ine to teach you botany bere? Whatever I want you to know of it I shall send you to your Professor of Botany, and to the Botanic Gardens, to learn. I may, perhaps, give you a rongh sketch of the lines of timber in a bough, bnt nothing more.

So again, admit that, to draw a stone, you need a knowledge of geology. I have told you that you do not, but admit it. Do you expect me to teach you, here, the relations between quartz and oxide of iron; or between the Silurian and Permian systems? If you care abont them, go to Professor Phillips, and come back to me when you know them.

And, in like manner, admit that, to draw a man, you want the knowledge of his bones:-you do not; but admit that you do. Why should you expect me, here, tc teach you the most difticult of all the sciences? If you want to know it, go to an hospital, and cut dead bodies to pieces till you are satisfied; then come to me, and I'll make a shift to teach you to draw, even then-though your eyes and memory will be full of horrible things which Heaven never meant you so much as a glance at. But don't expect me to help you in that ghastly work; any more than among the furnaces and retorts in Professor Maskelyne's laboratory.
161. Let us take one more step in the logical sequence. You do not, I have told you, need either chemistry, botany, geology, or anatomy, to enable you to understand art, or produce it. . But there is one science which you must be acquainted with. You must very intensely and thoroughly know-how to behave. You cannot so much as feel the difference between two casts of drapery, between two tendencies of line,--how much less letween dignity and baseness of gesture,-but by your own dignity of character. But, though this is an essential science, and although I cannot teach you to lay one line beside another rightly, unless yon have this science, you don't expect me in these schools to teach yon how to behave, if yon happen not to know it before!
162. Well, here is one reason, and a sufficiently logical one, as you will find it on consideration, for the exclusion
of auatonical study from all drawing schools. But there is a more cogent reason than this fur its exclusion, especially from elementary drawing-schools. It may be sometimes desirable that a student shonld see, as I said, how very unlike a face a skull is; and at a leisure moment ho may, without much harm, observe the equivocation between knees and ankles by which it is contrived that his legs, if properly made at the joints, will ouly bend backwards, but a crane's forwards. But that a young boy, or girl, brought up fresh to the schools of art from the country, should be set to stare, against every particle of wholesome grain in their natures, at the Elgin marbles, and to draw them with dismal application, until they imagine they like them, makes the whole youthful temper rotten with affectation, and sickly with strained and ambitious fancy. It is still worse for young persons to be compelled to endure the horror of the dissecting-room, or to be made familiar with the conditions of actnal bodily form, in a climate where the restraints of dress mnst forever prevent the body from being perfect in contour, or regarded with entirely simple feeling.
163. I have now, perhaps too often for your patience, told you that you must always draw for the sake of your subject-never for the sake of your picture. What you wish to see in reality, that you should make an effort to show, in pictures and statnes; what you do not wish to ree in reality, you should not try to draw.

But there is, I supposn, a very general impression on
the mind of persons interested in the arts, that lecanse nations living in cold climates are necessarily unfamiliar with the sight of the naked body, therefore, art should take it upon herself to show it them; and that they will be elevated in thought, and made more simple and grave in temper, by seeing, at least in colour and marble, what the people of the south saw in its verity.
164. I have neither time nor inclination to enter at present into discussion of the various effects, on the morality of nations, of more or less frank showing of the nude form. There is no question that if shown at all, it should be shown fearlessly, and seen constantly; but I do not care, at present, to debate the question : neither will I delay you by any expression of my reasons for the rule I am about to give. Trust me, I have many ;-and I can assert to you as a positive and perpetual law, that so much of the nude body as in the daily life of the nation may be shown with modesty, and seen with reverence and delight, -so much, and no more, ought to be shown by the national arts, either of painting or sculpture. What, more than this, either art exhibits, will, assuredly, pervert taste, and, in all probability, morals.
165. It will, assuredly, pervert taste, in this essential point, that the polite ranks of the nation will come to think the living creature and its dress exempt from the highest laws of taste; and that while a man or woman must, indeed, be seen dressed or undressed with dignity, in marble, they may be dressed or undressed, if not with
indignity, at least, with less than dignity, in the ball-room, and the street. Now the law of all living art is that the living man and woman must be more beautiful than their pictures, and their pictures as decorous as the living man or woman; and that real dress, and gesture, and behaviour, should be more graceful than any marble or colour can effect similitude of.
166. Thus the idea of a different dress in art and reality, of which that of art is to be the ideal one, perverts taste in dress; and the study of the nude which is rarely seen, as much perverts taste in art.

Of all pieces of art that I know, skilful in execution, and not criminal in intention;-without any exception, quite the most vulgar, and in the solemn sense of the word, most abominable, are the life studies which are said to be the best made in niodern times,-those of Mulready, exhibited as models in the Kensington Museum.
167. How far the study of the seldom-seen nude leads to perversion of morals, I will not, to-day, inquire; bnt I beg you to observe that even among the people where it was most frank and pure, it unquestionably led to evil far greater than ally good which demonstrably can be traced to it. Scarcely any of the moral power of Greece depended on her admiration of beanty, or strength in the body. The power of Greece depended on practice in military exercise, involving severe and continual ascetic discipline of the senses; on a perfect code of military heroism and patriotic honour ; on the desire to live by the
laws of an admittedly divine justice; and on the vivid conception of the presence of spiritual beings. The mere admiration of physical beanty in the body, and the arts which songht its expression, not only conduced greatly to the fall of Greece, but were the canse of errors and crimes in her greatest time, which must for ever sadden our happiest thonghts of her, and have rendered her example almost useless to the future.
168. I have named four causes of her power: discipline of senses; romantic ideal of heroic honour; respect fur justice ; and belief in God. There was a fifth-the most precious of all-the belief in the purity and force of life in man; and that true reverence for domestic affection, which, in the strangest way, being the essential strength of every nation under the smn, has yet been lost sight of as the chief element of Greek virtue, though the Iliad itself is nothing but the story of the puuishment of the rape of Helen ; and though every Greek hero called himself chiefly by his parental name,-Tydides, rather than Diomed ;--Pelides, rather than Achilles.

Among the new knowledges which the modern sirens tempt you to pursue, the basest and darkest is the endeavour to trace the origin of life, otherwise than in Love. Pardon me, therefore, if I give you a piece of theology to-day: it is a science much closer to your art than anatomy.
169. All of you who have ever read yonr Gospels carefully must have wondered, sometimes, what could be the
meaning of those words,-"If any speak against the Son of Man it shall be forgiven; but if against the Holy Spirit, it shall not be forgiven, neither in this world nor in the next."

The passage may have many meanings which I do not know; bnt one meaning I know positively, and I tell you so just as frankly as I would that I knew the meaning of a verse in Homer.

Those of you who still go to chapel say every day your creed; and, I suppose, too often, less and less every day believing it. Now, you may cease to believe two articles of it, and,-admitting Christianity to be true,-still be forgiven. But I can tell you-you must not cease to believe the third!

You begin by saying that you believe in an Almighty Father. Well, you may entirely lose the sense of that Fatherhood, and yet be forgiven.

Yon go on to say that you believe in a Saviour Son. You may entirely lose the sense of that Sonship, and yet be forgiven.

But the third article-disbelieve if you dare!
"I believe in the Holy Ghost, The Lord and Giver of Life."

Disbelieve that! and your own being is degraded into the state of dust driven by the wind; and the elements of dissolution have entered your very heart and soul.

All Nature, with one voice-with one glory, is set to teach you reverence for the life commmnicated to you
from the Father of Spirits. The song of birds, and their plumage; the scent of flowers, their colour, their very existence, are in direct connection with the mystery of that communicated life : and all the strength, and all the arts of men, are measured hy, and founded upon, their reverence for the passion, and their guardianship of the purity, of Love.
170. Gentlemen,-the word by which I at this moment address you-by which it is the first of all your duties through life, to permit all men to address you with truththat epithet of 'gentle,' as you well know, indicates the intense respect for race and fatherhood,-for family dig. nity and chastity,-which was visibly the strength of Rome, as it had been, more disguisedly, the strength of Greece. But have you enough noticed that your Saxon word ' kindness' has exactly the same relation to ' kin,' and to the Chaucerian 'kinde,' that 'gentle' has to 'gentilis'?

Think out that matter a little, and you will find thatmuch as it looks like it-neither chemistry, nor anatomy, nor republicanism, are going to have it all their own way -in the making of either beasts, or gentlemen. They look sometimes, indeed, as if they had got as far as two of the Mosaic plagues, and manufactured frogs in the ditches, and lice on the land; but their highest boasters will not slaim, yet, so much even as that poor victory.
171. My friends, let me very strongly recommend you to give up that hope of finding the principle of life in dead bodies; but to take all pains to keep the life pure and
holy in the living bodies you have yot; and, farther, not to seek your national amusement in the destruction of animals, nor your national safety in the destruction of men; but to look for all your joy to kindness, and for all your strength to domestic faith, and law of ancestral honour. Perhaps you will not now any more think it strange that in beginning your natural history studies in this place, I mean to teach you heraldry, but not anatomy. For, as you learn to read the shields, and remember the stories, of the great houses of England, and find how all the arts that glorified them were founded on the passions that inspired, you will learn assuredly, that the ntmost secret of national power is in living with honour, and the ntmost secrets of hmman art are in gentleness and truth.

## LECTUREIX.

## THE STORY OF THE HALCYON.

March 7th, 1872.
172. I must to-day briefly recapitulate the purport of the preceding lectures, as we are about now to enter on a new branch of our subject.

I stated, in the first two, that the wisdom of art and the wisdom of science consisted in their being each devoted unselfishly to the service of men: in the third, that art was ouly the shadow of our knowl edge of facts; and that the reality was always to be acknowledged as more beautiful than the shadow. In the fonrth lecture I endeavoured to show that the wise modesty of art and science lay in attaching due value to the power and knowledge of other people, when greater than our own; and in the fifth, that the wisc self-sufficiency of art and science lay in a proper enjoyment of our own knowledge and power, after it was thus modestly esteemed. The sixth lecture stated that sight was a distinctly spiritual power, and that its kindness or tenderness was proportioned to its clearncss. Lastly, in the seventh and eighth lectures, I asserted that this spiritual sight, concerned with external aspects of things, was the somree
of all necessary knowledge in art; and that the artist has no concern with invisible structures, organic or inorganic.
173. No concern with invisible structures. But much with invisible things; with passion, and with historical association. And in these two closing lectures, I hope partly to justify myself for pressing on your attention some matters as little hitherto thought of in drawing-schools, as the exact sciences have been highly, and, I believe, unjustly, esteemed ;-mythology, namely, and heraldry.
I can but in part justify myself now. Your experience of the interest which may be found in these two despised sciences will be my best justification. But to-day (as we are about to begin our exercises in bird-drawing) I think it may interest you to review some of the fables connected with the natural history of a single bird, and to consider what effect the knowledge of such tradition is likely to. have on our mode of regarding the animated creation in general.
174. Let us first take an instance of the feeling towards birds which is especially characteristic of the English temper at this day, in its entire freedom from superstition.

You will find in your Rudimentary Series (225), Mr. Gould's plate of the lesser Egret,--the most beantiful; 1. suppose, of all birds that visit, or, at least, once visited, our English shores. Perfectly delicate in form, snowwhite in plumage, the feathers like frost-work of dead
silver, exquisitely slender, separating in the wind like the streams of a fountain, the creature looks a living clond rather than a bird.

It may be seen often enough in South France and Italy. The last (or last but one?) known of in England came thirty years ago, and this was its reception, as related by the present happy possessor of its feathers and bones:-
"The little Egret in my possession is a most beantifnl specimen; it was killed by a labourer with a stick, in Ake Carr, near Beverly, about 1840, and was brought tc me, tied up in a pocket-handkerchief, covered with black wet mod and blood, in which state it was sent to Mr. Reed, of Doncaster, and restored by him in a most marvellous manner."
175. Now, yon will feel at once that, while the peasant was beating this bird into a piece of bloody flesh with his stick, he conld not, in any true sense, see the bird; that he had no pleasure either in the sight of that, or of anything near it.
You feel that he would become capable of seeing it in exact proportion to his desire not to kill it; but to watch it in its life.

Well, that is a quite general law: in the degree in which you delight in the life of any ereature, you can see it; no otherwise.
And you wonld feel, would you not, that if you could enable the peasant rightly to see the bird, you had in great part educated him?
176. You would certainly have gone, at least, the third of the way towards educating him. Then the next thing to be contrived would be that he should be able to see a man rightly, as well as a bird; to understand and love what was good in a man, so that, supposing his master was a good man, the sight of his master should be a joy to him. You would say that he was therein better educated than if he wanted to put a gun through a hedge and shoot his master.

Then the last part of education will be-whatever is meant by that beatitude of the pure in heart-seeing God rightly, of which I shall not speak to-day.
177. And in all these phases of education, the main point, you observe, is that it should be a beatitude: and that a man should learn " $\chi$ aí $\rho \epsilon \iota \nu$ op $\theta \hat{\omega}$ ::" and this rejoicing is above all things to be in actual sight; you have the truth exactly in the saying of Dante when he is brought before Beatrice, in heaven, that his eyes "satisfied themselves for their ten years' thirst."

This, then, I repeat, is the sum of education. All literature, art, and science are vain, and worse, if they do not enable you to be glad; and glad justly.

And I feel it distinctly my duty, thongh with solemn und true deference to the masters of education in this university, to say that I believe our modern methods of teaching, and especially the institution of severe and frequent examination, to be absolutely opposed to this great end ; and that the result of competitive labour in
youth is infallibly to make men know all they learn wrongly, and hate the habit of learning; so that instead of coming to Oxford to rejoice in their work, men look forward to the years they are to pass under her teaching as a deadly agony, from which they are fain to escape, and sometimes for their life, must escape, into any method of sanitary frivolity.
178. I go back to my peasant and his egret. Yon all think with some horror of this man, beating the bird to death, as a brutal person. He is so ; bnt how far are we English gentlemen, as a body, raised above him? We are more delicately murtured, and shrink from the notion of bruising the creature and spoiling its feathers. That is so far right, and well. But in all probability this countryman, rude and cruel though he might be, had some other object in the rest of his day than the killing of birds. And very earnestly I ask yon, have English gentlemen, as a class, any other real object in their whole existence than killing birds? If they discern a dnty, they will indeed do it to the death; bnt have the English aristocracy at this moment any elear notion of their duty? I believe solemuly, and without jest, their idea of their easte is that its life shonld be, distinctively from inferior human lives, spent in shooting.

And that is not an idea of caste with which England, at this epoch, can any longer be governed.
179. I have no time to-day to push my argument farther; but I have said enough, I think, to induce you
to bear with me in the statement of my main theoremthat reading and writing are in no sense education, unless they contribute to this end of making us feel kindly towards all creatures; but that drawing, and especially physiologic drawing, is vital education of a most precious kind. Farther, that more good would be done by any English nobleman who would keep his estate lovely in its native wildness; and let every animal live upon it in peace that chose to come there, than will be done, as nuattors are going now, by the talk of all the Lords in Parliament, as long as we live to listen to them; and, I will even venture to tell jon my hope, though I shall be dead long before its possible fulfilment, that one day the English people will, indeed, so far recognize what edncation means as to surround this university with the loveliest park in England, twenty miles square; that they will forbid, in that environment, every unclean, mechanical, and vulgar trade and manufacture, as any man would forbid them in his own garden;-that they will abolish every basc and ugly building, and nest of vice and misery, as they would cast out a devil ;-that the streams of the Isis and Cherwell will be kept pure and quict among their fields and trees; and that, within this park, every English wild flower that can bloom in lowland will be suffered to grow in luxuriance, and every living creature that haunts wood and stream know the it has happy rofuge.

And now to om immediate work.
180. The natural history of anything, or of any creature, divides itself properly into three branches.

We have first to collect and examine the traditions respecting the thing, so that we may know what the effect of its existence has hitherto been on the minds of men, and may have at our command what data exist to help us in our own inquiries about it, or to guide us in our own thoughts of it.

We have secondly to examine and describe the thing, or creature, in its actual state, with utmost attainable veracity of observation.

Lastly, we have to examine under what laws of chemistry and physic the matters of which the thing is made has been collected and constructed.

Thus we have first to know the poetry of it-i.e., what it has been to man, or what man has made of it.

Secondly, the actual facts of its existence.
Thirdly, the plysical causes of these facts, if we can discover them.
181. Now, it is customary, and may be generally advisable, to confine the term 'natqral history' to the last two branches of knowledge only. I do not care what we call the first branch ; bat, in the accounts of animals that I prepare for my schools at Oxford, the main point with me will be the mythology of them ; the second, their actual state and aspect, (second, this, because almost always hitherto only half known); and the anatomy and chemis. try of their bodies, I shall very rarely, and partially, as I
told you, examine at all: but I shall take the greatest pains to get at the creature's habits of life; and know ali its ingenuities, humours, delights, and intellectual powers. That is to say, what art it has, and what affection; and how these are prepared for in its external form.
182. I say, deliberately and energetically, 'prepared for,' in opposition to the idea, too prevalent in modern philosophy, of the form's being fortuitonsly developed by repetition of impulse. It is of course true that the aspects and eharacters of stones, flowers, birds, beasts, and men, are inseparably connected with the conditions under which they are appointed to have existence; but the method of this comnection is infinitely varied; so far from fortuitons, it appears grotesquely, often terrifically, arbitrary; and neither stone, flower, beast, nor man can understand any single reason of the arbitrament, or comprehend why its Creator made it thus.
183. To take the simplest of instances,-which happens also to be one of the most important to you as artists,-it is appointed that vertebrated animals shall have no more than four legs, and that, if they require to fly, the two legs in front must become wings, it being against law that they should have more than these four nembers in ramifi cation from the spine.

Can any law be conceived more arbitrary, or more ap parently causeless? What strongly planted three-legged animals there might have been! what symmetrically radiant five legged ones! what vulatile six-winged ones!
what circumspeet seven-headed ones! Had Darwinism been true, we should long ago have split our heads in two with foolish thinking, or thrust ont, from above our covetous hearts, a hundred desirous arms and clutching hands; and changed ourselves into Briarean Cephalopoda. But the law is around us, and within; unconquerable; granting, up to a certain limit, power over our bodies to circumstance and will: beyond that limit, inviolable, inscrutable, and, so far as we know, eternal.
184. For every lower animal, similar laws are established ; under the grasp of these it is capable of ehange, invisibly permitted oscillation between certain points; beyond which, according to present experience, it cannot pass. The adaptation of the instruments it possesses in its members to the conditions of its life is always direct, and occasionally beautifnl; but in the plurality of instances, partial, and involving painful supplementary effort. Some animals have to dig with their noses, some to build with their tails, some to spin with their stomachs: their dexterities are usually few-their awkwardnesses number-less;-a lion is continually puzzled how to hold a bone; and an eagle can scarcely pull the meat off one, withont upsetting himself.
185. Respecting the origin of these varionsly awkward, imperfectly, or grotesquely developed phases of form and power, you need not at present inquire: in all probability the race of man is appointed to live in wonder, and in acknowledgment of ignorance; but if ever he is to know
any of the secrets of his own or of brutal existence, it wil assuredly be through discipline of virtue, not through inquisitiveness of science. I have just used the expression, "had Darwinism been true," implying its fallarg more positively than is justifiable in the present state of our knowledge ; but very positively I can say to you that I have never heard yet one logical argument in its favour, and I have heard, and read, many that were beneath contempt. For instance, by the time you have copied one or two of your exercises on the feather of the halcyon, you will be more interested in the construction and disposition of plume-filaments than heretofore; and you may, perhaps, refer, in hope of help, to Mr. Darwin's account of the peacock's feather. I went to it myself, hoping to learn some of the existing laws of life which regulate the local disposition of the colour. But none of these appear to be known ; and I am informed only that peacocks have grown to be peacocks out of browu pheasants, because the young feminine brown pheasants like fine feathers. Whereupon I say to myself, "Then either there was a distinct species of brown pheasants originaily born with a taste for fine feathers; and therefore with remarkable eyes in their heads,-which would be a mnch more wonderful distinction of species than being born with remarkable eyes in their tails,--or else all pheasants would have been peacocks by this time!" And I trouble myself. no more about the Darwinian theory.

When you have drawn some of the actual patterns of
plume and scale with attention, I believe you will see reason to think that spectra of organic species may be at least as distinct as those of metals or gases; but learn at all events what they are now, and never mind what they have been.
186. Nor need you care for methods of classification any more than for the origin of classes. Leave the physiologists to invent names, and dispute over them; your business is to know the creature, not the name of it momentarily fashionable in scientific circles. What practical service you can get from the order at present adopted, take, without contention; and as far as possible, use English words, or be sure you understand the Latin ones.
187. For instance, the order at present adopted in arranging the species of birds is, as you know, fonnded only on their ways of using their feet.

Some catch or snatch their prey, and are called "Snatch-ers"-Raptores.

Some perch on branches, and are called "In-sitters," or Upon-sitters-INsessores.

Some climb and cling on branches, and are called Climb-ers-Scansores.

Some scratch the ground, and are called "Scratchers" -rasores.

Some stand or wade in shallow water, and, having long legs, are called "Stilt-walkers"-Grallatores.

Some float, aud make oars of their feet, and are called "Swimmers"-natatores.
188. This class:fication is unscholarly, because there are many snatchers anc scratchers who perch as well as the sitters; and many of the swimmers sit, when ashore, more neatly than the sitters themselves; and are most grave incessors, in long rows, on rock or sand: also, 'ineessor' does not mean properly a sitter, but a besieger ; and it is awkward to call a bird a 'Rasor.' Still, the use of the feet is on the whole characteristic, and convenient for first rough arrangeinent ; only, in general reference, it will be better to use plain English words than those stiff Latin ones, or their ugly translations. Liunæus, for all his classes except the stilt-walkers, used the name of the particular birds which were the best types of their class ; he called the snatchers "hawks" (Accipitres), the swinmers, geese, (Anseres), the scratchers, fowls, (Gallinae), and the perchers, sparrows, (Passeres). He has no class of climbers; but he has one since omitted by Cuvier, "pies," which, for certain mythological reasons presently to be noted, I will ask you to keep. This will give you seven orders, altogether, to be remembered ; and for each of these we will take the name of its most representative bird. The hawk has best right undoubtedly to stand for the snatchers; we will have his adversary, the heron, for the stilt-walkers; you will find this very advisable, no less than convenient; becanse some of the beaks of the stilt-walkers turn down, and some turn up; but the heron's is straight, and so he stands well as a pure middle type. Then, certainly, gulls will better represent the swimmers than gecse ; and phea-
sants are a prettier kind of scratchers than fowls. We will take parrots for the climbers, magpies for the pies, and sparrows for the perchers. Then take them in this order: Hawks, parrots, pies, sparrows, pheasants, gulls, herons; and you can then easily remember them. For you have the hawks at one end, the herons at the other, and sparrows in the middle, with pies on one side and pheasants opposite, for which arrangement you will find there is good reason; then the parrots necessarily go beside the hawks, and the gulls beside the herons.
189. The bird whose mythic history I am abont to read to you belongs essentially and characteristically to that order of pies, picae, or painted birds, which the Greeks continnally opposed in their thoughts and traditions to the singing birds, representing the one by the magnie, and the other by the nightingale. The myth of Autolyous and Philammon, and Pindar's exquisite story of the infidelity of Coronis, are the centres of almost conntless tra ditions, all full of meaning, dependent on the varions тоєкi入ía, to eye and ear, of these opposed races of birds. The Greek idea of the Halcyon united both these sources of delight. I will read yon what notices of it I find most interesting, not in order of date, but of brevity; the simplest first.
190. "And the King of Trachis, the child of the Morning Star, married Alcyone. And they perished, both of them, throngh their pride; for the king called his wife, Hera; and she her husband, Zeus: but Zeus made birds
of them (aủtov̀s á $\pi \omega \rho \nu \epsilon \in \omega \sigma \epsilon$ ), and he made the one a Halcyon, and the other a Sea-mew."-Apollodorus, i. 7, 4.
" When the King of Trachis, the son of Hesperus, or of Lacifer, and Philonis, perished in shipwreck, lis wife Alcyone, the daughter of Aolus and Egiale, for love of him, threw herself into the sea;-who both, by the mercy of the gods, were turned into the birds called Halcyons. These birds, in the winter-time, build their nests, and lay their eggs, and hatch their young on the sea; and the sea is quiet in those days, which the sailors call the Hal-cyonia."-Hyginus, Fab. LXV.
191. "Now the King of Trachis, the son of Lucifer, had to wife Halcyone. And he, wishing to consult the oracle of Apollo concerning the state of his kingdom, was forbidden to go, by Halcyone, nevertheless he went; and perished by shipwreck. And when his body was brought to his wife Halcyone, she threw herself into the sea. Afterwards, by the mercy of Thetis and Lucifer, they were both turned into the sea-birds called Halcyons. And you ought to know that Halcyone is the woman's uame, and is always a feminine noun; but the bird's name is Halcyon, masculine and feminine, and so also its plural, Halcyones. Also those birds make their nests in the sea, in the middle of winter; in which days the calm is so deep that bardly anything in the sea can be moved. Thence, also, the days themselves are called Halcyonia." -Servius, in Virg. Georg. i. 399.
192. "And the pairing of birds, as I said, is for the
most part in spring time, and early summer; except the halcyon's. For the halcyon has its young about the turn of days in winter, wherefore, when those days are fine, they are called 'Halcyonine' (ả入киóveıoı); seven, indeed, before the turn, and seven after it, as Simonides poctized, ( $\frac{\epsilon}{\tau} \sigma \boldsymbol{\eta} \eta \sigma \epsilon \nu$ ).

> 'As, when in the wintry month
> Zeus gives the wisdom of calm to fourteen days, Then the people of the land call it The hour of wind-hiding, the sacred Nurse of the spotted Halcyon.'
"" And in the first seven days the halcyon is said to lay her eggs, and in the latter seven to bring forth and nourish her young. Here, indeed, in the seas of Greece, it does not always chance that the Halcyonid days are at the solstice; but in the Sicilian sea, almost always. But the æthuia and the laros bring forth their young, (two, or three) among the rocks by the sea-shore; but the laros in summer, the æthnia in first spring, just after the turn of days ; and they sit on them as other birds do. And none of these birds lie torpid in holes during the winter; but the halcyon is, of all, seen the seldomest, for it is seen scarcely at all, except just at the setting and turn of Pleias, and then it will but show itself once and away; flying, perhaps, once round a ship at anchor, and then it is gore iustantly "-Aristotle, Hist. Av., v. 8, 9.
193. "Now we are ready enough to extol the bee for a
wise creature, and to consent to the laws by which it cares for the yellow honey, because we adore the pleasantness and tickling to our palates that is in the sweetness of that; but we take no notice of the wisdom and art of other creatures in bringing up their young, as for instance, the lalcyon, who as soon as she has conceived, makes her nest by gathering the thorns of the sea-needle-fish; and, wearing these in and out, and joining them together at the ends, she finishes her nest; round in the plan of it, and lung, in the proportion of a fisherman's net; and then she puts it where it will be beaten by the waves, until the rough surface is all fastened together and made close. And it becomes so hard that a blow with iron or stone will not easily divide it; but, what is more wonderful still, is that the opening of the nest is made so exactly to the size and measure of the halcyon that nothing larger can get into it, and nothing smaller !-so they say ;-" no, not even the sea itself, even the least drop of it."-Plur. tarch : De Amore Prolis.

I have kept to the last Lucian's dialogue, "the Hal. cyon," to show you how the tone of Christian thought, and tradition of Clurist's walking on the sea, began to steal into heathen literature.

## Soorates-Chaerfiphon.

194. "Chaercphon. What cry is that, Socrates, which came to us from the beach; low sweet it was; what can it be? the things that live in the sea are all mute
"Scicrates. Yet it is a sea-creature, Chaerephon; the bird called Halcyon, concerning which the old fable runs that she was the danghter of Жolus, and, mourning in her youth for her lost husband, was winged, by divine power, and now flies over the sea, seeking him whom she could not find, sought throughout the earth.
"Chaerephon. And is that indeed the Halcyon's ciry? I never heard it yet; and in truth it is very pitiful. How large is the bird, Socrates?
"Socrates. Not great; but it has received great honour from the Gods, because of its lovingness; for while it is making its nest, all the world has the happy days which it calls halcyonidæ, excelling all others in their calmncss, though in the midst of storm; of which you see this very day is one, if ever there was. Look how clear the sky is, and the sea waveless and calm, like a mirror!
"Chaerephon. You say truly, and yesterday was just such another. But in the name of the Gods, Socrates, now is one to believe those old sayings, that birds were ever cllanged into women, or women into birds, for nothing could seem more impossible ?
195. "Socrates. Ah, dear Chaerephon, it is likely that we are poor and blunt jndges of what is possihle and not: for we judge by comparing to human power a power unknown to us, unimaginable, and unseen. Mauy things, therefore, that are easy; seem to us difficult; and many things uuattainable that may be attained;
being thus thought of, some through the inexperience, and some through the infantine folly, of our minds. Fol in very deed every man may be thought of as a childeven the oldest of us,-since the full time of life is little, and as a baby's, compared to universal time. And what should we have to say, my good friend, who know nothing of the power of gods or of the spirits of Nature, whether any of such things are possible or not? You saw, Ohaerephon, what a storm there was, the day before yesterday; it makes one tremble even to think of it again ;--that lightning, and thunder, and sudden tempest, so great that one would have thought all the earth falling to ruin; and yet, in a little while, came the wonderful establishing of caln, which has remained even till now. Whether, then, do you think it the greater work to bring such a calm out of that tormenting whirlwind, and reduce the universe to peace, or to change the form of a woman into that of a bird? For indeed we see how very little children, who know how to knead clay, do something like this also; often out of one lump they will make form after form, of different natures: and surely to the spirit-powers of Nature, being in vast and inconjecturable excess beyond ours, all such things must be in their hands easy. Or how much do you think heaven greater than thyself--can you say, perchance?
"Chaerephon. Who of men, O Socrates, could imagine or name any of these things?
196. "Socrates. Nay; do we not see also, in compar.
ing man with man, strange differences in their powers and imbecilities: for complete manhood, compared with utter infancy, as of a child five or ten days old, has difference in power, which we may well call miraculous: and when we see man excel man so far, what shall we say that the strength of the whole heaven must appear, against ours, to those who can see them together, so as to compare them? Also, to you and me, and to many like us, sundry things are impossible that are easy to other people; as singing to those ignorant of music, and reading or writing to those ignorant of letters;-more impossible than to make women birds, or birds of women. For Nature, as with chance throw, and rough parable, making the form of a footless and wingless beast in changeable matter; then putting on feet and wings, and making it glitter all over with fair variegation and manifold colour, at last brings out, for instance, the wise bee, maker of the divine honey; and out of the voiceless and spiritless egg she brings many kinds of flying and foot-going and swimming creatures, using besides (as runs the old Logos), the sacred art of the great Aether.* We then, being altogether mortal and mcan, and neither able to see clearly great things nor small, and, for the most part being unable to help ourselves even in our own calamities,--what can we have to say abont the powers of the immortals, either over halcyons or nightingales? But the fame of fable such as our fathers gave it to us, this, to my children, $O$ thon

[^8]bird singing of sorrow, I will deliver concerning thy hymns: and I myself will sing often of this religious and human love of thine, and of the honour thou hast for it from the Gods. Wilt not thou do likewise, O Chaerephon?
"Chaerephon. It is rightly due indeed, O Socrates, for there is two-fold comfort in this, both for men and women, in their relations with each other.
"Soorates. Shall we not then salute the halcyon, and so go back to the city by the sands, for it is time.
"Chaerephon. Indeed let us do so."
197. The note of the scholiast on this dialogue is the only passage in which I can find any approximately elear description of the Greek halcyon. It is about as large, he says, as a small sparrow: (the question how large a Greek sparrow was we must for the present allow to remain open;) and it is mixed of green and blue, with gleaming of purple above, and it has a slender and loug beak : the beak is said to be "chloros," which I venture to translate "green," when it is used of the feathers, but it may mean anything, used of the beak. Then follows the same account as other people's, of the nest-brilding, except that the nest is compared in shape to a medicinal gourd. And then the writer goes on to say that there are two species of halcyous-one larger than the other, and silent, but the smaller, fond of singing ( $\omega \delta \iota \kappa \grave{\eta}$ ); and that the females of these are so true to their mates that, when the latter grow old, the female bird flies underneath them,
and carries them wherever they would like to go ; and after they die will not eat nor drink anything, and so dies too. "And there is a certain kind of them, of which, if any one hear the vaice, it is an altogether true sign to lim that he will die in a short time."
198. You will, I think, forgive me, if, after reading to you these lovely fables, I do not distract yon, or detain, with the difficult investigation of the degree in which they are founded on the not yet sufficiently known facts of the Kingfisher's life.

I would much rather that you should remain impressed with the effect which the lovely colour and fitful appearance of the bird have had on the imagination of men. I may satisfy you by the assurance that the halcyon of England is also the commonest halcyour of Greece and of Palestine; and I may at once prove to you the real gain of being acquainted with the traditions of it, by reading to you two stanzas, certainly among the most familiar to your ears in the whole range of English poetry; yet which, I am well assured, will sound, after what we have been reflecting upon to-day, almost as if they were new to you. Note especially how Milton's knowledge that Halcyone was the daughter of the Winds, and Ceyx the son of the Morning Star, affects the course of his thought in the successive stanzas-

> "But peaceful was the night,
> Wherein the Prince of light
> His reign of peace upon the earth began:

> The winds with wonder whist,
> Smoothly the waters kist,
> Whispering new joys to the mild ocean,
> Who now hath quite forgot to rave,
> While birds of calm sit brooding on the charmed wave.
> "The stars, with deep amaze,
> Stand fix'd in steadfast gaze,
> Bending one way their precious influence;
> And will not take their fight,
> For all the morning light
> Of Lucifer, that often warn'd them thence;
> But in their glimmering orbs did glow,
> Until their Lord himself bespake, and bid them go."
199. I should also only weary you if I attempted to give you any interpretation of the much-entangled web of Greek fables connected with the story of Halcyone. You observe that in all these passages I have said "King of Trachis" instead of Ceyx. That is partly because I don't know how to pronounce Ceyx, either in Greek or English: but it is chiefly to make you observe that this story of the sea-mew and Halcyon, now known through all the world like the sea-mew's cry, has its origin in the "Rough country," or crag-country, under Mount Eta, made sacred to the Greek mind by thie death of Heracles; and observe what strange connection that death has with the Halcyon's story. Heracles goes to this "Rough country" to scek for rest; all the waves and billows of his life har-ing-as he thinks now-gone over him. But he finds death.

As far as I can form any idea of this "rongh, or toru, country" from the descriptions of Colonel Leake or any
other traveller, it must resemble closely the limestone cliffs just above Altorf, which break down to the valley from the ridge of the Windgelle, and give source at their foot, to faultlessly clear streams,--green-blue among the grass.

You will find Pausanias noting the springs of Thermopylæ as of the bluest water he ever saw; and if you fancy the Lake Lucerne to be the sea bay running inland from Artemisium, you will have a clear and useful, nor in any serious way, inaccurate, image of the scene where the Greeks thought their best hero shonld die. You may remember also, with advantage, that Morgarten-the Thermopylæ of Switzerland-lies by the little lake of Egeri, not ten miles from this bay of Altorf ; and that the Heracles of Switzerland is born under those Trachinian crags.

If, farther, you remember that the Halcyon would actually be seen flitting above the blue water of the springs, like one of their waves caught up and lighted by the sun; and the sea-mews haunting the cliffs, you will see how physical circumstances modify the under-tone of the words of every mythic tradition.

I eannot express to you how strange-how more and more strange every day-it seems to me, that I cannot find a single drawing, nor definite account, of scenes so memorahle as this, to point yon to ; but must guess and piece their image together for you as best I can from their Swiss similitudes. No English gentleman can pass through public school-life withont knowing his Trachiniæ;
yet, I believe, literally, we could give better account of the forms of the mountains in the moon, than we could of Eta. And what has art done to help us? How many Skiddaws or Benvenues, for one Eta,-if one! And when the English gentleman becomes an art-patron, he employs his painter-servant only to paint himself and his house; and when Turner was striving, in his youth, to enforce the mythology, and picture these very scenes in Greece, and putting his whole strength into the endeavour to conceive them, the noble pictures remained in his gallery ;-and for bread, he had to paint -_ Hall, the seat of ——, Esquire, with the carriage drive, the summerhouse, and the squire going out hunting. .

If, indeed, the squire would make his seat worth painting, and would stay there, and would make the seats, or, shall we call them, forms, of his peasantry, worth painting too, he would be interpreting the fable of the Halcyon to purpose.

But you must, at once, and without any interpreter, feel for yourselves how much is implied in those wonderful words of Simonides-written six hundred years before Christ ;-" when in the wild winter months, Zens gives the wisdom of calm; " and how much teaching there is for us in this imagination of past days,-this dream-picture of what is true in days that are, and are to come,-that perfect domestic love not only makes its nest upon the waves, but that the waves will be calm that it may.
200. True, I repeat, for all ages, and all people, that,
indeed, are desirous of peace, and loving in tronble! But what fable shall we invent, what creature on earth or sea shall we find, to symbolize this state of ours in modern England? To what sorrowful birds shall we be likened, who make the principal object of our lives dispeace, and unrest ; and turn our wives and daughters out of their nests, to work for themselves?

Nay, strictly speaking, we have not even got so much as nests to turn them out of. I was infinitely struck, only the other day, by the saying of a large landed proprietor (a good man, who was doing all he could for his tenantry, and building new cottages for them), that the best he could do for them, under present conditions of wages, and the like, was, to give them good drainage and bare walls.
"I am obliged," he said to me, "to give up all thought of anything artistic, and $\cdot$ even then, I must lose a considerable sum on every cottage I build."
201. Now, there is no end to the confused states of wrong and misery which that landlord's experience signifies. In the first place, no landlord has any business with building cottages for his people. Every peasant should be able to build his own cottage,--to build it to his mind ; and to have a mind to build it to. In the second place, note the unhappy notion which has grown up in the modern English mind, that wholesome and necessary delight in what is pleasant to the eye, is artistic affectation. You have the exponent of it all in the central and mighty affectation of the Houses of Parliament. A number of Eng-
lish gentlemen get together to talk: they have no delight whatever in any kind of beauty; but they have a vague notion that the appointed place for their conversation should be dignified and ornamental ; and they build over their combined heads the absurdest and emptiest piece of filigree,-and, as it were, eternal foolscap in freestone,which ever human beings disgraced their posterity by. Well, all that is done, partly, and greatly, in mere jobbery; but essentially also in a servile imitation of the Hôtel-de-Ville builders of old time ; but the English gen tleman has not the remotest idea that when Hôtel-de Villes were built, the ville enjoyed its hotel ;-the town had a real pride in its town hall, and place of council, and the sculptures of it had precions meaning for all the populace.
202. And in like manner, if cottages are ever to be wisely built again, the peasant must enjoy his cottage, and be himself its artist, as a bird is. Shall cock-robins and yellowhammers have wit enough to make themselves comfortable, and bullfinches peck a Gothic tracery out of dead clematis,-and your English yeoman be fitted by his landlord with four dead walls and a drain-pipe? That is the result of your spending $300,000 l$. a year at Kensington in science and art; then? You have made beautiful machines, too, wherewitl you save the peasaut the trouble of ploughing and reaping, and threshing; and, after being saved all that time and toil, and getting, one would think, leisure enough for his education, you have to lodge him also, as you drop a puppet into a deal box, and you lose
money in doing it! and, two hundred years aso, without steam, without electricity, almost without books, and altogether without help from Cassell's Educator or the moruing newspapers, the Swiss shepherd could build himself a châlet, daintily carved, and with flourished inscriptions, and with red and blue and white moькıлía; and the burgess of Strasburg could build himself a house like this I showed you, and a spire such as all men know; and keep a precious book or two in his public library, and praise God for all: while we,-what are we good for, but to damage the spire, knock down half the houses, and burn tlie library,-and declare there is no God but Chemistry?
203. What are we good for? Are even our machines of destruction useful to us? Do they give us real power? Once, indeed, not like halcyons, but like sea-cagles, we had our homes upon the sea; fearless alike of storm or enemy, winged like the wave petrel ; and as Arabs of an indeed pathless desert, we dwelt in the presence of all our brethren. Our pride is fallen; no reed shaken with the wind, near the little singing halcyon's nest, is more tremulous than we are now ; though we have built iron nests on the sea, with walls impregnable. We have lost our pride-but have we gained peace? Do we even care to seek it, how mucli less strive to make it?
204. Have yon ever thought seriously of the meaning of that blessing given to the peacemakers? People are always expecting to get peace in heaven; but you know whatever peace they get there will be ready-made,

Whatever making of peace they can be blest for, must be on the earth here: not the taking of arms against, but the building of nests amidst, its "sea of troubles." Difficult enough, you think? Perhaps so, but I do not see that any of us try. We complain of the want of many things-we want votes, we want liberty, we want amusement, we want money. Which of us feels, or knows, that he wants peace?
205. There are two ways of getting it, if you do want it. The first is wholly in your own power; to make yourselves nests of pleasant thoughts. Those are nests on the sea indeed, but safe beyond all others; only they need much art in the building. None of ns yet know, for none of us have yet been taught in early jouth, what fairy palaces we may butild of beautiful thought-proof against all adrersity. Bright fancies, satisfied memories, noble histories, faithful sayings, treasure-houses of precious and restful thoughts, which care cannot disturb, nor pain make gloomy, nor poverty take away from ns-houses built without hands, for our souls to live in.
206. And in actual life, let me assure you, in conclusion, the first 'wisdom of calm,' is to plan, and resolve to labour for, the comfort and beauty of a home such as, if we could obtain it, we would quit no more. Not a compartment of a model lodging-house, not the number so-and-so of Paradise Row; but a cottage all of our own, with its little garden, its pleasant view, its surrounding fields, its ncighbouring stream, its healthy air, and clean
kitchen, parlours, and bedrooms. .Less than this, no man should be content with for his nest; more than this few should seek: but if it seem to you impossible, or wildly imaginary, that suci houses should ever be obtained fur the greater part of the English people, again believe me, the obstacles which are in the way of our obtaining them are the things which it must be the main object now of all true science, true art, and true literature to overcome. Science does its duty, not in telling us the canses of spots in the sun; but in explaining to us the laws of our own life, and the consequences of their violation. Art does its duty, not in filling monster galleries with frivolons, or dreadful, or indecent pictures; but in completing the comforts and refining the pleasures of daily occurrence, and familiar service: and literature does its duty, not in wasting our hours in political discussion, or in idle fiction ; but in raising our fancy to the height of what may be noble, honest, and felicitons in actual life; -in giving us, thongh we may ourselves be poor and unknown, the companionship of the wisest fellow-spirits of every age and country,-and in aiding the communication of clear thoughts and faithful purposes, among distant nations, which will at last breathe calm upon the sea of lawless passion, and change into such halcyon days the winter of the world, that the birds of the air may have their nestr in peace, and the Son of Man, where to lay his head.

## LECTURE X

## THE HERALDIC ORDINARIES.

March 9th, 1872.
207. Is my last lecture, I endeavoured to illustrate you the use of art to the science of physiology. I am to-dayं to introduce to yon its elementary forms as an exponent of the seience of history. Which, speaking with perfect accuracy, we ought to call, also, " physiology," or naturai history of man ; for it ought to be in truth the history of his Nature ; and not merely of the accidents which have befallen him. Do we not too much confuse the important part of the science with the unimportant?

In giving the natural history of the lion, you do not care materially where such and such a lion was trapped, or how many sheep it had eaten. You want to know what sort of a minded and shaped creature it is, or ought to be. But in all our books of hmman history we only care to tell what has happened to men, and how many of each other they have, in a manner, eaten, when they are, what Homer calls $\delta \eta \mu o \beta o ́ \rho o u, ~ p e o p l e-e a t e r s ; ~ a n d ~ w e ~$ scarcely understand, even to this day, how they are truly minded. Nay, I am not sure that even this art of heraldry, which has for its main object the telling and
proclamation of our chief minds and characters to each other, and keeping record of our descent by race, as far as it is possible, (or, under the present aspect of Darwinism, pleasant,) to trace it ;-I am not sure that even heraldry has always understood clearly what it had to tell. But I an very sure it has not been understood in the telling.
208. Some of you have, I hope, looked at this book* of Arthur Helps, on ' War and Culture,' about which I cans not now say what I would, because he has done me the grace of dedicating it to me ; but yon will find in it, directly bearing on our present subject, this story about heraldry :
"A friend of mine, a physician, became entangled in the crowd at Kennington on that memorable evening when a great Chartist row was expected, and when Lonis Napoleon armed himself with a constable's staff to support the canse of order. My friend observed a young man of pleasant appearance, who was very busy in the crowd, and appeared to be a leader amongst them. Gradually, by the pressure of the crowd, the two were brought near together, and the good doctor had some talk with this fiery partisan. They exchanged confidences; and to his astonishment, the doctor found that this furious young Chartist gained his livelihood, and a very good livelihood too, by heraldic painting-by painting the coats-of-arms upon carriages. Now, if you can imagine this young man's darling enterprise to have been successful, if

[^9]Chartism had prevailed, what would have becume of the painting of arms upon carriage-panels? I believe that my good doctor insinuated this suggestion to the young man, and that it was received with disdain. I must own, therefore, that the utile, even when brought home to a man's self, has much less to do with people's political opinions and desires, than might at first be supposed. Indeed, I would venture to maintain, that no great change has ever been produced in the world by motives of selfinterest. Sentimeut, that thing which many wise people affect to despise, is the commanding thing as regards popular impulses and popular action."
209. This last sentence would have been wholly true, had Mr. Helps written 'no great living change.' The changes of Dissolution are continually produced by self-interest,-for instance, a great number of the changes in your methods of life in England just now, and mauy of those in your moral temper, are produced by the percentage on the sale of iron. And I shonld have otherwise interpreted the heroism of the young Chartist, and said that he was moved on the 10th of April, by a deep under-current of self-interest; that by overthrowing Lordship, he expected to get much more for himself than his salary as an heraldic painter; and that he had not, in painting his carriage-panels, sentiment enough, or even sentiment at all.
" Paint me my arms,_" said Giotto, as the youth threw him his white shield, with that order,-" he speaks
as if he were one of the Bardi!" Our English panelpainter had lost the conscionsness that there yet remained above him, so much as one, of the Bardi.

May not that be somewhat the Bardi's fault? in that they have not taught their Giottos, lately, the function of heraldry, or of any other higher historical painting.

We have, especially, to-day, to consider what that function is.
210. I said that the function of historical painting, in representing animals, is to discern and record what is best and most beautiful in their ways of life, and their forms; so also, in representing man, it is to record of man what has been best in his acts and way of life, and fairest in his form.

But this way of the life of man has been a long one. It is difficult to know it-more difficult to judge; to do either with complete equity is impossible ; but it is always possible to do it with the charity which does not rejoice in iniquity.
211. Among the many mistakes we have lately fallen iuto, touching that same charity, one of the worst is our careless habit of always thinking of her as pitiful, and to be concerned only with miserable and wretched persons; whereas her chief joy is in being reverent, and concr: ned mainly with noble and venerable persons. Her poorest function is the giving of pity; her highest is the giving of praise. For there are many men, who, however fallen,
do not like to be pitied; but all men, however far risen, like to be praised.
212. I had occasion in my last lecture to express my regret that the method of education in this country has become so distinctly competitive. It is necessary, however, to distinguish carefully between the competition which is for the means of existence, and that which is for the praise of learning. For my own part, so far as they affect our studies here, I equally regret both: but competition for money I regret absolntely; competition for praise, only when it sets the reward for too short and narrow a race. I want you to compete, not for the praise of what you know, but for the praise of what you become; and to compete only in that great school, where death is the examiner, and God the judge. For you will find, if you look into your own hearts, that the two great delights, in loving and praising, and the two great thirsts, to be loved and praised, are the roots of all that is strong in the deeds of men, and happy in their repose. We yet, thank Heaven, are not ashamed to acknowledge the power of love; but we confusedly and doubtfully allege that of honour; and thongh we cannot but instinctively triumph still, over a won boat-race, I suppose the best of us would shrink somewhat from declaring that the love of praise was to be one of the chief motives of their future lives.
213. But I believe you will find it, if you think, not only one of the chief, but absolntely the chief, motive of human action ; nay, that love itself is, in its highest state,
the rendering of an exquisite praise to body and soul; and our English tongue is very sacred in this; for its Saxon word, love, is connected, through the old French verb, loer, (whence louange), with the Latin, 'laus,' not ' amor.'

And you may sum the duty of your life in the giving of praise worthily, and being yourselves worthy of it.
214. Therefore in the reading of all history, your first purpose must be to seek what is to be praised ; and disdain the rest: and in doing so, remember always that the most important part of the history of man is that of his imagination. What he actually does, is always in great part accidental ; it is at best a partial fulfilment of his purpose; and what we call history is often, as I said, merely a record of the external accideuts which befall men getting together in large crowds. The real history of mankind is that of the slow advance of resolved deed following laboriously just thought; and all the greatest men live in their purpose and effort more than it is possible for them to live in reality. If you would praise them worthily, it is for what they conceived and felt; not merely for what they have done.
215. It is therefore a true historian's work diligently to separate the deed from the imagination; and when these become inconsistent, to remember that the imagination, if precious at all, is indeed the most precious. It is nc matter how mucl, or how little of the two first books of Livy may be literally true. The history of the Romans is
the history of the cation which could conceive the battle of the Lake Regillus. I have rowed in rough weather on the Lake of the four cantons often enough to know that the legend of Tell is, in literal detail, absurd: but the history of Switzerland is that of the people who expressed their imagination of resistance to injustice by that legend, so as to animate their character vitally to this day.
216. But in no part of history does the ideal separate itself.so far from the reality; and in no part of it is the ideal so necessary and noble, as in your own inherited his-tory-that of Christian Chivalry.

For all English gentlemen, this is the part of the tale of the race of man which it is most essential for them to know. They may be proud that it is also the greatest part. All that hitherto has been achieved at best,--all that has been in noble preparation instituted,-is begun in the period, and rooted in the conception, of Chivalry.

You must always carefully distinguish that conception from the base strength of the resultless passions which distort and confuse it. Infinitely weaker, the idea is eter- nal and creative; the clamorous rages pass away,-ruinous it may be, prosperous it may be, for their time;-but insignificant for ever. You find kings and priests alike, always inventing expedients to get money; you find kings and priests alike, always inventing pretexts to gain power. If you want to write a practical history of the Middle Ages, and to trace the real reasons of the things that actually happened, investigate first the history of the money;
and then of the quarrels for office and territory. 13ut the things that actually happened were of small consequence -the thoughts that were developed are of infinite consequence.
217. As I was walking back from Hincksey last evening, somewhat discomforted by the look of bad weather, and more in myself, as I thonght over this closing lecture, wondering how far you thought I had been talking idly to you, instead of teaching you to draw, through this term, I stopped before Messrs. Wyatt's window ; caughtas it was intended every one should be,-by its display of wonderful things. And I was very unhappy as I looked, for it seemed to me yon could not but think the little I could show yon how to do quite valueless; while here were produced, by mysteries of craft which you might expect me at once to explain, brilliant watercolours in purple and gold, and photographs of seawaves, and chromolithotints of beautiful young ladics, and exquisitely finished engravings of all sorts of interesting scenes, and sublime personages ; patriots, saints, martyrs, penitents, and who not! and what not! all depicted with a dexterity which it has cost the workmen their life's best energy to learn, and requires great cleverness thus to apply. While, in your room for stady, there are only ugly photographs of Dürers and Holbeins, and my rude' outlines from leaves, and you scarcely ever hear me say anything in praise of that delightful and elaborate modern art at all.
218. So I bought this Madonna,* which was the prettiest thing I saw: and it will enable me to tell you why this modenn art is, indeed, so little to be studied, even at its best. I think you will all like the plate, arid you ought to like it; but observe in what its beanty consists. First, in very exquisite line engraving: against that I have nothing to say, feeling the greatest respect for the industry and skill it requires. Next, in a grace and severity of action which we all are ready to praise; but this is not the painter's own bestowing; the trick of it is learned from Memling and Van Eyck, and other men of the northern religions school. The covering of the robe with jewels is pleasing to you; but that is learned from Angelico and John Bellini ; and if you will compare the jewel-painting in the John Bellini (Standard No. 5), you will find this false and formal in comparison. Then the face is much dignified by having a crown set on itwhich is copied from the ordinary thirteenth century form, and ill done. The face itself is studied from a young German mother's, and is only by the painter's want of skill made conventional in expression, and formal in feature. It would have been wiser and more difficult to have painted her as Raphael or Reynolds would, with true personal resemblance, perfected in expression.
219. Nevertheless, in its derivative way, this is very ovely. But I wish yon to observe that it is derivative

[^10]in all things. The dress is derivative; the action, derivative: above all, the conception is derivative altogether, from that great age of Christian chivalry, which, in art and thought'alike, surpassed the Greek chivalry, becanse it added to their enthusiasm of patriotism the enthusiasm of imaginative love, sanctified by this ruling vision of the Madonna, as at once perfect maid and perfect mother.

And your study of the art of the middle ages must begin in yonr understanding how the men of them looked on Love as the sonree of all hononr, as of life; and how, from the least thing to the greatest, the honouring of father and mother, the noble esteem of children, and the sincere respect for race, and for the courtesies and prides that graced and crowned its purity, were the sources of all their virtne, and all their joy.
220. From the least things, I say, to the greatest. I am to speak to-day of one of apparently the least things; which is, indeed, one of the greatest. How much of the dignity of this Madonna, do yon suppose, depends on the manner she bears her dress, her crown, her jewels, and her sceptre?

In peasant and prince alike, you will find that ultimately, character is truly heralded in dress; and that splendonr in dress is as necessary to man as colour to birds and flowers, but splendour with more meaning. Splendonr, observe, however, in the true Latin sense of the word; brightness of colonr; not gandiness: what I
have been telling you of colour in pictures will apply equally to colour in dress: vulgarity consists in the insolence and discord of it, not in brightness.
221. For peasant and prince alike, in healthy national order, brightness of dress and beautifnl arrangement of it are needful. No indication of moral decline is more sure than the squalor of dress among the lower orders, and the fear or shame of the higher classes to bear their proper insignia.

Such fear and shame are singularly expressed, here in Oxford, at this hour. The nobleman ceases to wear the golden tassel in his cap, so accepting, and publicly heralding his acceptance of, the popular opinion of him that he has ceased to be a nobleman, or noteworthy person.* And the members of the University, generally, shrink from wearing their academical dress, so accepting, and publicly heralding their acceptance of, the popular opinion that everybody else may be as good scholars as they. On the other hand, I see continnally in the streets young men in bright costumes of blue and white; in such evidently prond heraldry proclaiming their conviction that the chicf object of residence in

[^11]Oxford is learning to row; the rowing itself being, I imagine, not for real boat service, but for purposes of display.
222. All dress is thus heraldic; a soldier's dress only more definitely so, in proclaiming the thing he means to die as well as to live for; but all is heraldic, from the beggar's rag to the king's diadem; it may be involuntarily, it may be, insolently; but when the characters of men are determined, and wise, their dress becomes heraldic reverently, and in order.. "Togam e tngurio proferre uxorem Raciliam jubet;" and Edic Ochiltree's blue gown is as honourably heraldic as a knight's ermine.
223. The beginning of heraldry, and of 'all beautiful dress, is, however, simply in the wearing of the skins of slain animals. You may discredit, as much as you choose, the literal meaning of that earliest statement, "Unto Adam also, and to his wife, did the Lord God make coats of skins, and clothed them;" but the figurative meaning of it only becomes the stronger. For if you think of the skins of animals as giving the four great materials of dress-leather, fur, wool, and down, you will see in this verse the summary of what has ever since taken place in the method of the providence of the Maker of Man and beast, for the clothing of the naked creature who was to rule over the rest.
224. The first practical and savage use of such dress was that the skin of the head of the beast became a covering for the head of its slayer : the skin of its body his
coat; the skin of the fore legs was knotted in front, and the skin of the hind legs and tail became tassels, the jags of the cut edges forming a kind of fringe here and there.

You have thus the first conception of a helmet, with the mane of the animal for its crest or plume, and the first conception of a cuirass, variously fringed, striped, or spotted: in complete accoutrement for war, you have to add spear, (or arrow), and shield. The spear is properly a beam of wood, iron pointed; the shield a disk of leather, iron fronted.

And armed strength for conduct is symbolized for all future time' by the Greeks, under the two types of Heracles and Athena; the one with the low lion's crest and the arrow, the other with the high horse's crest, and the spear; one with the lion-skin, the other with the goat-kkin;both with the round shield.
225. The nebris of Dionusos, and leopard-skin of the priests of Egypt relate to astronomy, not war; and the interest in their spots and bars, as variously symbolic, together with real pleasure in their grotesqueness, greatly modified the entire system of Egyptian colour-decoration. On the earliest Greek vases, also, the spots and bars of the animals are carried out in spots or chequers upon the ground, (sometimes representing flowers), and the delight in " divers colours of needlework," and in fantasy of emoroidery, gradually refine and illumine the design of Eastern dress. But only the patterns derived from the
colours of animals become classical in heraldry under the general name of "furres," one of them "vaire" or "verrey" (" the variegated fur,") rudely figuring the material composed of the skins of small animals sewn together, alternately head to tail ; the other, ermine, peculiarly honourable, from the costliness, to southern nations, of the fur it represents.
226. The name of the principal heraldic colour has a similar origin: the "rams' skins dyed red" which were used for the curtains of the Jewish tabernacle, were always one of the principal articles of commerce between the east and west: in mediæval Latin they were called "gulae," and in the French plural "gules," so that to be dressed in "gules" came gradually to mean being dressed in the particular red of those skins, which was a full soft scarlet, not dazzling, but warm and glowing. It is used, in opposition to darker purple, in large masses in the fresco painting of later Rome; -is the dominant colour of ornamental writing in the middle ages (giving us the ecclesiastical term "rubric"), and asserts itself finally, and most nobly, in the fresco paintings of Ghirlandajo and Luini. I have tried to represent very closely the tint of it Luini has given to St. Catherine's mantle, in my study in your schools. Titian keeps it also as the key-note of his frescoes; so also Tintoret; but Raphael, Correggio, and Michael Angelo, all substituted orange for it in opposition to purple; and the entire scheme of colour in the Vatican frescoes is of orange and purple, broken by green and
white, on a ground of grey. This orange and purple opposition in meaner hands became gaudy and feeble, and the system of mediæval colour was at last totally destroyed by it; the orange remaining to this day the favourite, and most distinctive, hue in bad glass painting
227. The forms of dress, however, derived from the skins of animals are of much more importance than the colours. Of these the principal is the crest, which is properly the mane of lion or horse. The skin of the horse was neither tongh, nor of convenient size for wearing; but the classical Greek helmet is only an adaptation of the outline of its head, with the mane floating behind: many Etruscan helmets have ears also, while, in mediæval armour, light plates, cut into the shape of wings of birds, are often placed on each side of the crest, which then becomes not the mane of the animal merely, but the image of the entire creature which the warrior desires to be renowned for having slain.
228. The Heraldic meaning of the crest is accordingly, first, that the Knight asserts himself to have prevailed over the animal it represents; and to be stronger than snch a creature would be, therefore, against his hnman enemies. Hence, gradually, he considers himself invested with the power and character of the slain creature itself; and, as it were, to have taken from it, for his spoil; not its skin only, but its strength. The crest, therefore, is the heraldic indication of personality, and is properly to be distinguished from the bearing on the shiold, becanse that
mdicated race; but the crest, personal character and valour.
229. I have traced the practical truth which is the foundation of this idea of the transmitted strength of the slain creature becoming the inheritance of its victor, in the account given of the coins of Camarina, in the Queen of the Air. But it is strange and sad to reflect how much misery has resulted, in the history of man, from the imaginative excuse for cruelty afforded by the adopted character of savage animals; and how many wolves, bears, lions, and eagles, have been national symbols, instead of gentler creatures. Even the heraldic symbol of Christ is in Italy oftener the lion than the lamb: and among the innumerable painters of his Desert Prophet, only Filippo Lippi mnderstood the full meaning of the raiment of camel's hair, and made him wear the camel's skin, as Heracles the Lion's.
230. Although the crest is thus essentially an expression of personal character, it practically becomes hereditary; and the sign on shield and helmet is commonly the same. But the slield has a system of bearings peculiar to itself, to which I wish especially to direct your attention to-day.

Our word 'shield' and the German 'schild ' mean 'the covering thing,' that behind which you are sheltered, but yon must be careful to distinguish it from the word shell, which means properly a scale or plate, developed, like a fish's scale, for the protection of the body.

There are properly only two kinds of shields, one round and the other square, passing into oval and oblong; the round one being for use in free action, the square one for adjustment to ground or walls; but, on horseback, the lower part of the shield must be tapered off, in order to fall conveniently on the left side of the horse.

And, therefore, practically, you have two great forms of shield ; the Greek round one, for fighting on foot, or in the chariot, and the Gothic pointed one for fighting on horseback. The oblong one for motionless defence is, however, almost always given to the mythic figure of Fortitude, and the bearings of the Greek and Gothic shields are always designed with reference to the supposed figures of the circle and square.

The Greek word for the round shield is 'aspis.' I have no doubt merely a modification of 'apsis' the potter's wheel ; the proper word for the Gothic shield is 'ecn' from the Latin 'scutum,' meaning a shield eovered with leather. From 'ecu' you have 'ecuyer;'-from scutum 'scutiger,' both passing into our English 'squire.'
231. The aspis of the Greeks might be much heavier than the Gothic shield, because a Greek never rode fully armed; his object was to allow both to his horse and to himself the most perfect command of limb compatible with protection ; if, therefore, he was in full armonr, and wanted his horse to carry lim, he put a board upon wheels, and stood on that, harnessing sometimes to it four horses of the highest breed abreast. Of all hitherto
practised exertions of manual dexterity, the driving thus at full speed over rough ground, standing in the chariot, is, as far as I know, the greatest ever attained by general military discipline.

It is true that to do anything perfectly well is about equally difficult; and I suppose that in a chariot race, a tournament, or a modern game at cricket, the manual art of the most highly-trained men would be almost equally fine; still, practically, in Gothic chivalry, the knight trusted more to his weight and less to his skill than a Greek did; nor could a horse's pace under armour ever render precision of aim so difficult as at unarmed, speed.
232. Another great difference of a parallel kind exists in the knight's body-armôur. A Greek never hopes to turn a lance by his cuirass, nor to be invulnerable, except by enchantment, in his body armour, because he will not have it cumbrous enough to impede his movemonts; but he makes his shield, if possible, strong enough to stop a lance, and carries it as he would a piece of wall: a Gothic knight, on the contrary, endeavoured to make his coat armour invulnerable, and carried the shield merely to ward thrusts on the left side, never large enough to encumber the arm that held the reins. All fine design in Gothic heraldry is founded, therefore, on the form of a short, but pointed shield, convex enough to throw the point of a spear aside easily; a form roughly extending from the beyinuing of the twelfth to the middle of the fifteenth
century, but of which the most beautiful types are towards the end of the thirteenth.
233. The difference in method of device between the Gothic and classic shields resulted partly from this essential difference in form. The pointed shield, having definitely two sides, like a pointed arch, and a determined position, naturally suggested an arrangement of bearinge definitely on one side or the other, or above, or below the centre, while the Greek shield had its boss, or its main bearing, in the centre. always, with subordinate decoration round. Farther, the Gothic fineness of colourinstinct seized at once on this division of parts as an opportunity for inlaying or counterchanging colours; and finally, the respect for race, carried out by registry of the remotest branches of noble families, compelled the Gothic heralds of later times to use these methods of dividing or quartering in continually redoubled complexity.
234. Essentially, therefore, as distinguished from the classic shield, the Gothic one is parti-colonred beneath its definite bearings, or rather, bi-coloured; for the tinctures are never more than two in the main degign of them ; and the specific methods of arrangement of these two masses of colour have deeper and more ancient heraldic significance than, with few exceptions, the: superimposed bearings. I have arranged the twelve principal ones * in the 7th of your rudimentary exer-

[^12]cises, and they will be entrrely fixed in your minds by once drawing it.
235. Observe respecting them.

1. The Chiefe; a bar of colour across the upper part of the shield, signifies authority or chief-dom, as the source of all order, power, and peace.
2. The Cross, as an ordinary, distinguished from the cross as a bearing, consists simple of two bars dividing the shield into four quarters; and, I believe, that it does not in this form stand properly as a symbol of Christian faith, but only as one of Christian patience and fortitude. The cross as a symbol of faith is terminated within the field.
3. The Fesse, a horizontal bar across the middle of the shield, represents the knight's girdle, or anything that binds and secures, or continues. The word is a corruption of fascia. Sir Francis Drake received for arms from Queen Elizabeth a Fesse waved between two pole-stars, where it stands for the waved surface of the sea, and partly, also, to signify that Sir Francis put a girdle round the earth; and the family of Drummond carries three diminutive Fesses, or bars, waved, because their ancestor brought Queen Margaret safe through many storms.
4. The Beud, an oblique bar descending from right to
ordinary use therein, in regard whereof they are called 'ordinaries.' "See Gutllim, sect. ii. chap. iii. (Ed. 1638.)
"They have also the title of honourable ordinaries in that the court armour is much honoured thereby." The French call them "pièce" nonorables."
left of the holder of the shield, represents the sword-belt The Latin balteus and balteum are, I believe, the origin of the word. They become bendellus and beudellum; then bandeau and bande. Benda is the word used for the riband round the neck of St. Etheldreda, in the account of her death quoted by Du Cange. I believe, also, the fesse stands often for the cross-bar of the castle gate, and the bend for its very useful diagonal bar: this is only a conjecture, but I believe as likely to be true as the idea, certainly admitted in heraldry, that the bend sometimes stands for a scaling ladder: so also the next four most inportant ordinaries have all an architectural significance.
5. The Pale, an upright bar dividing the shield in half, is simply an upright piece of timber in a palisade. It signifies either defence or enclosure.
6. The Pile, a wedge-shaped space of colour with the point downwards, represents what we still eall a pile; a piece of timber driven into moist ground to secure the foundation of any building.
7. The Canton, a square space of colour in either of the upper corners of the shield, signifies the corner-stone of a building. The origin and various use of this word
 for the eorner of the eyes, becomes canto, and then cantonus. The French coin (corner), is usually derived from the Latin conens; but I have ne donbt it is one corrup. tion of canton: the medirral-Latin cantonus is either un angle or recess, or a forr-square corner-stone. The heral-
dic canton is the corner-stone of a building, and the French eantounier is a road-mender, because the essential thing in repairing a ruad is to get its corner or edge firm.
8. The Chevron, a band bent at an angle (properly a right angle), with its point upwards, represents the gable or roof of a honse. Thus the four last-named ordinaries represent the four essentials of a fixed habitation: the pale, its enclosure within a given space of ground ; the pile, its foundation; the canton its wall, and the chevron its roof.
9. The Orle, a narrow band following the outline of the shield midway between its edge and centre, is a more definite expression of enclosure or fortification by mote or rampart. The relations of this word, no less than that of the eanton, are singular, and worth remembering. Du Cange quotes under it an order of the municipality of Piacenza, that always, in the custom-house where the salt-tax was taken, "a great orled disk" should be kept; "dischus magnus orlatus," i.e., a large plate with a rim, in which every day fresh salt should be placed. Then note that the word disk is used in the middle ages, either for a plate, or a table, (the "holy disk" is the patina of the sacrament), but most generally for a table, whence you get the old German disch ; our dish, the French disner, diner; and our dinner. The disk cutout into a ring becomes a quoit, which is the simplest form of orle. The word 'orle' itself eomes, I believe, from ora, in old Latin, which took a diminutive, orula; or perhaps the 1 was put in merely
tc distinguish, to the ear, a margined thing, 'orlatus,' from a gilded thing, 'auratus.' It stands for the hem of a robes, or the fillet of a crown, as well as for any margin; and it is given as an ordinary to such as have afforded protection and defence, because it defends what is within it. Reduced to a narrow band, it becomes a 'Tressure.' If you have a sovereign of 1860 to 1870 in your pocket, and look at the right hand upper corner of the Queen's arms, you will see the Scottish Lion within the tressure decorated with fleur-de-lys, which Scotlaņd bears in memory of hel treaty with Charlemagne.
10. The Gyron, a triangular space of eolour with its point in the centre of the shield, derives its name from the old Latin gyro, a fold, "pars vestis quâ laxior fit, et in superiori parte contracta, in largiorem formam in imo se explicat." The heraldie 'gyron,' however, also has a collateral reference to, and root in, the word 'gremium,' bosom or lap ; and it signifies properly the chief fold or fall of the dress either over the bosom, or between the knees ; and has whatever symbolic expression may be attributed to that fold, as a sign of kindness or protection. The influence of the lines taken by softly falling drapery in giving gentleness to the action of figures was always felt by the Gothic artists as one of the chief elements of design ; and the two constantly repeated figures of Christ holding souls in the 'gremium' of his robe, and of the Madonna casting hers over suppliants, gave an ineritably recognized association to them.
11. The Flasque, a space of colour terminated by a curved line on each flank of the shield, derives its name from the Latin flecto, and is the bearing of honour given for successful embassy, It must be counted among the ordinaries, but is of rare occurrence in what groups of anthentic bearings I have examined.
12. The Saltire, from salir, represents the securest form of machine for monuting walls; it has partly the same significance as the ladder of the Scaligers, but, being properly an ordinary, and not a bearing, has the wider general meaning of successful ascent, not that of mere local attack. As a bearing, it is the St. Andrew's Cross.
13. These twelve forms of ordinary then, or first colour divisions of the shield, represent symbolically the establishment, defence, and exaltation of the Knight's house by his Cluristian courage; and are in this symbolism, different from all other military bearings. They are throughout essentially founded on the "quartering" or division of the field into four spaces by the sign of the Cross: and the history of the chivalry of Europe is absolutely that of the connection of domestic honour with Christian faith, and of the exaltation of these two sentiments into the lighest enthusiasm by cultivated imagination.

The means of this culture by the finer arts ; the errors, or falls, of the enthusiasm so excited; its extinction by avarice, pride, and lust, in the period of the (so called)

Renaissance, and the possibility of a true Renaissance or Restoration of courage and pure hope to Christian men in their homes and industries, must form the general subject of the study into which I have henceforth to lead you. In a future course of lectures it will be my endeavour to show you, in the elementary forms of Christian architecture, the evidence of such mental development and decline in Europe from the tenth to the seventeenth century; but remember that my power, or any one else's, to show you truths of this kind, must depend entirely on the degree of sympathy you have in yourselves with what is decorous and generous. I use both these words advisedly, and distinctively, for every high quality of art consists either in some expression of what is decent,-becom-ing,-or disciplined in character, or of what is bright and generous in the forces of human life.

I need not say that I fear no want of such sympathy in you; yet the circumstances in which you are placed are in many respects adverse to it.
237. I find, on returning to the University after a period of thirty years, the scope of its teaching greatly extended, the zeal of its masters certainly undiminished; and, as far as I can judge, the feeling of the younger members of the University better, and their readiucss to comply with all sound advice, greater, than in my time. What scandals there have been among us, I think have been in great part accidental, and consequent chiefly on the intense I ced for excitement of some trivial kind, which
is provoked by our restless and competitive work. Ir temper, in general amenability to right guidance, and in their sense of the adrantages open to them, more may now be hoped than ever yet from the students of Oxford-one thing only I find wanting to them altogether-distinetness of aim.
238. In their new schools of science they learn the power of machinery and of physical elements, but not that of the soul; I am afraid, in our new schools of liberal religion they learn rather to donbt their own faiths than to look with patience or respect on those of others; and in our new schools of policy, to efface the canons of the past, without having formed any distinct conception of those which must regulate the institutions of the future.
239. It is therefore a matter of very deep rejoicing to me that, in bringing before your examination the best forms of English art, I am necessarily leading you to take interest in the history of your country at the time when, in to speak, it became England. You see how, in every college which is now extending or renewing its buildings, the adopted style is approximately that of the thirteenth century;--it being felt, and rightly felt, by a continuallyextending instinct, that only then the national mind had unimpaired power of ideal conception. Whatever else we may have adranced in, there is no dispute that, in the great arts, we have steadily, since that thirteenth century, declined: and I have, therefore, since accepting this professorship, partly again taken up my abandoned idea of
writing the story of that century, at least in England ;of writing it, or, at all events, collecting it, with the help of my pupils, if they care to help me. By myself, I can do nothing; yet I should not ask them to help me if I were not certain that at this crisis of our national existence the fixing the minds of young and old upon the customs and conception of chivalry is the best of all moral education. One thing I solemnly desire to see all children taught-obedience; and one to all persons entering into life-the power of unselfish admiration.
240. The incident which I have related in my fourth lecture on sculpture, seen by me last year on the bridge of Wallingford, is a sufficient example of the courtesies in which we are now bringing up our peasant children. Do you think that any science or art we can teach them will make them happy under such conditions? • Nay, in what courtesy or in what affection are we even now carefully training ourselves;-above all, in what form of duty or reverence to those to whom we owe all our power of understanding even what duty or reverence mean? I warned you in my former lecture against the base curiosity of seeking for the origin of life in the dust; in earth instead of heaven: how much more must I warn you against forgetting the true origin of the life that is in your own souls, of that good which you have heard with your ears, and your fathers have told you. You buy the picture of the Virgin as furniture for your rooms; but you despise the religion, and you reject the memory, of those who have
tanght you to love the aspect of whatsoever things and creatures are good and pure: and too many of you, entering into life, are ready to think, to feel, to act, as the men bid you who are incapable of worship, as they are of creation ;-whose power is only in destruction; whose gladnoss only in disdain; whose glorying is in their shame. You know well, I should think, by this time, that I am not one as scek to conceal from you any truth of nature, or superstitionsly decorate for vou any form of faith; but I trust deeply-(and I will strive, for my poor part, wholly, so to help you in steadfastness of heart)-that yon, the children of the Christian chivalry which was led in England by the Lion-Heart, and in France by Roland, and in Spain by the Cid, may nut stoop to become as these, whose thoughts are but to invent new foulness with which to blaspheme tie story of Christ, and to destroy the noble works and laws that have been founded in His name.

Wilı you not rather go round about this Englamd, and tell the towers thercof, and mark well her bulwarks, and consider her palaces, that you may tell it to the generation following? Will you not rather honour with all .your strength, with all your obedience, with all your holy love and never-ending worship, the princely sires, and pure maids, and nursing mothers, who have bequeathed and blest your life? --that so, for you also, and for your children, the days of strength, and the light of memory, may be long in this lovely land which the Lord your God has given you.

## FRONDES AGRESTES.

READINGS IN 'MODERN PAINTERS."

## FRONDES AGRESTES.

# READINGS IN "MODERN PAINTERS," 

CHONEN AT HER PLAGARURE
by the AUTHOR'S FRIEND,

## THE YOUNGER LADY OF THE THW $A I T E$, CONISTON.

Rustion

"Spargit agrestes tibi silva frondes."

NEW YORK:
JOHN WILEY \& SONS, PUBLISHERS,
15 Astor Place.
1881.

## PREFACE.

l Have been often asked to republish the first book of mine which the public noticed, and which, hitherto, remains their favourite, in a more easily attainable form than that of its existing editions. I am, however, reso'ved never to republish the book as a whole; some parts of it boing, by the established fame of Turner, rendered unnecessary; and others having been always useless, in their praise of excellence which the public will never give the labour necessary to discern. But, finding lately that one of my dearest friends, who, in advanced age, retains the cheerfulness and easily delighted temper of bright youth, had written out, for her own pleasure, a large number of passages from "Modern Painters," it seemed to me certain that what such a person felt to be useful to herself, could not but be useful also to a class of readers whom I much desired to please, and who would sometimes enjoy, in my early writings, what I never should myself have offered them. I asked my friend therefore, to add to her own already chosen series, any other passages she thought likely to be of permanent
(v)
interest to general readers; and I have printed her selec. tions in absolute submission to her judgment, merely arranging the pieces she sent me in the order which scemed most convenient for the reciprocal bearing of their fragmentary meanings, and adding here and there an explanatory note; or, it may be, a deprecatory one, in cases where my mind had changed. That she did me the grace to write every word with her own hand, adds, in my eyes, and will, I trust, in the readers' also, to the possible claims of the little book on their sympathy; and although I hope to publish some of the scientific and technical portions of the original volumes in my own large editions, the selections here made by my friend under her quiet woods at Coniston-the Unter-Walden of England-will, I doubt not, bring within better reach of many readers, for whom I am not now able myself to judge or choose, such service as the book was ever capable of rendering, in the illustration of the powers of nature, and interces. sion for her now too often despised ond broken peace

Herne Hill, 5th December, 1874.

## FRONDES AGRESTES.

## SECTION I.

PRINCIPLES OF ART.

1. Pqufect taste is the faculty of receiving the greatest possible pleasure from those material sources which are attractive to our moral nature in its purity and perfection; but why we receive pleasure from some forms and colours and not from others, is no more to be asked or answered than why we like sugar and dislike worm. wood.
2. The temper by which right taste is formed is char. acteristically patent. It dwells upon what is submitted to it. It does not trample upon it,-lest it should be pearls, even though it looks like husks. It is good ground, penetrable, retentive ; it does not send up thorns of unkind thoughts, to choke the weak seed; it is hungry and thirsty too, and drinks all the dew that falls on it. It is an honest and good heart, that shows no too ready springing before the sun bs up, kut fails not afterwards; it is distrustful of itself, so as to be ready to believe and
to try all things, and yet so trustful of itsclf, that it will neither quit what it has tried, nor take anything without trying. And the pleasure which it has in things that it finds true and good, is so great, that it cannot possibly be led aside by any tricks of fashion, or diseases of vanity; it cannot be cramped in its conclusions by partialities and nypocrisies; its visions and its delights are too penetrat-ing,-too living,-for any white-washed object or shallow fountain long to endure or supply. It clasps all that it loves so hard that it crushes it if it be hollow
3. It is the common consent of men that whatever branch of any pursuit ministers to the bodily comforts, and regards material uses, is ignoble, and whatever part is addressed to the mind only, is noble; and that geology does better in reclothing dry bones and revealing lost creations, than in tracing veins of lead and beds of iron; astronomy better in opening to us the houses of heaven, than in teaching navigation ; botany better in displaying structure than in expressing juices; surgery better in investigating organization than in setting limbs.-Only it is ordained that, for our encouragement, every step we make in the more exalted range of science adds something also to its practical applicabilities; that all the great phenomena of nature, the knowledge of which is desired by the angels only, by us partly, as it reveals to farther vision the being and the glory of Him in whom they rejoice and we live, dispense yet such kind influences and so much of material blessing as to be joyfully felt by all inferion
ureatures, and to be desired by them with such single desire as the imperfection of their nature may admit; that the strong torrents, which, in their own gladness, fill the hills with hollow thunder, and the vales with winding light, have yet their bounden charge of field to feed, and barge to bear; that the fierce flames to which the Alp owes its upheaval and the volcano its terror, temper for us the metal vein, and warm the quickening spring; and that for our incitement, I say, not our reward,--for know edge is its own reward,-herbs have their healing, stones their preciousness, and stars their times.
4. Had it been ordained by the Almighty* that the highest pleasure of sight should be those of most difficult attainment, and that to arrive at them it should be necessary to accumulate gilded palaces, tower over tower, and pile artificial mountains around insinuated lakes, there would never have been a direct. contradiction between the unselfish duties and the inherent desires of every individual. But no such contradiction exists in the system of Divine Providence; which, leaving it open to us if we will, as creatures in probation, to abuse this sense like every other, and pamper it with selfish and thoughtless vanities, as we pamper the palate with deadly meats, until the appetite of tasteful cruelty is lost in its sickened

[^13]satiety, incapable of pleasure unless, Caligula like, it con centrates the labour of a million of lives into the sensa tion of an hour, leaves it also open to us, -by humble and loving ways, to make ourselves susceptible of deep delight, which shall not separate us from our fellows, nor require the sacrifice of any duty or occupation, but which shall bind us closer to men and to God, and be with us always, harmonized with every action, consistent with every claim, unchanging and eternal.
5. A great Idealist never can be egotistic. The whole of his power depends upon his losing sight and feeling of his own existence, and becoming a mere witness and mirror of truth, and a scribe of visions-always passive in sight, passive in utterance, lamenting continually that he cannot completely reflect nor clearly utter all he has seennot by any means a proud state for a man to be in. But the man who has no invention is always setting things in order,* and putting the world to rights, and mending, and beautifying, and pluming himself on his doings, as supreme in all w่ays.
6. So far as education does indeed tend to make the senses delicate, and the preceptions accurate, and thus enables people to be pleased with quiet instead of gaudy colour, and with graceful instead of coarse form; and by long acquaintance with the best things, to discern quickly what

[^14]is fine from what is common-so far acquired taste is an honourable faculty, and it is true praise of anything to say, it is "in good taste." But,* so far as this higher education has a tendency to narrow the sympathies and harden the heart, diminishing the interest of all beautiful things by familiarity, until even what is best can hardly please, and what is brightest hardly entertain-so far as it fosters pride, and leads men to found the pleasure they take in anything, not on the worthiness of the thing, but on the degree in which it indicates some greatness of their own, (as people build marble porticoes, and inlay marble floors, not so much because they like the colours of marole, or find it pleasant to the foot, as because such porches and floors are costly, and separatea in all human eyes from plain entrances of stone and timber)-so far as it leads people to prefer gracef 1 lness of dress, manner, and aspect, to value of substance and heart, liking a well said thing better than a true thing, and a well trained manner better than a sincere one, and a delicately-formed face better than a good natured one-and in all other ways and things setting custom and semblance above everlasting truth-so far, finally, as it induces a sense of inherent distinction between class and class, and eauses everything to be more or less despised which has no social rank, so that the affection, pleasure, or grief of a clown are looked upon as of no interest compared with the affection and grief of a well

[^15]bred man-just so far, in all these several ways, the feeling induced by what is called "a liberal education" is utterly adverse to the understanding of noble art.
7. He who habituates himself in his daily life to seek for the stern facts in whatever he hears or sees, will have these facts again brought before him by the involuntary imaginative power, in their noblest associations; and he who seeks for frivolities and fallacies, will have frivolities and fallacies again presented to him in his dreams.*
8. All the histories of the Bible are yet waiting to be painted. Moses has never been painted; Elijah never; David never (except as a mere ruddy stripling); Deborah never; Gideon never; Isaiah never. $\dagger$ What single example does the reader remember of painting which suggested so much as the faintest shadow of their deeds? Strong men in armour, or aged men with flowing beards, he may remember, who, when he looked at his Louvre or Uffizii catalogue, he found were intended to stand for David or Moses. But does he suppose that, if these pic-

[^16]tures had suggested to him the feeblest image of the presence of such men, he would have passed on as he assuredly did, to the next picture, representing, doubtless, Diana and Actæon, or Cupid and the Graces, or a gambling quarrel in a pothouse-with no sense of pain or surprise? Let him meditate over the matter, and he will find ultimately that what I say is true, and that religious art at once complete and sincere never yet has existed.

## SECTION II.

## POWER AND OFFICE OF IMAGINATION.

9. What are the legitimate uses of the imagination,that is to say, of the power of perceiving, or conceiving with the mind, things which cannot be perceived with the senses? Its first and noblest use is,* to enable us to bring sensibly to our sight the things which are recorded as belonging to our future state, or invisibly surrounding us in this: It is given us, that we may imagine the cloud of witnesses, in heaven, and carth, and sea, as if they were now present; the souls of the righteous waiting for us; that we may conceive the great army of the inhabitants of heaven, and discover among them those whom we most desire to be with for ever; that we may be able to vision forth the ministry of angels beside us, and see the chariots of fire on the mountains that gird us round; but, above all, to call up the scenes and facts in which we are commanded to believe, and be present, as if in the body, at every re. corded event of the history of the Redeemer. Its second and ordinary use is, to empower us to traverse the scenes

[^17]of all other history, and force the facts to become again visible, so as to make upon us the same impression which they would have made if we had witnessed them; and, in the minor necessities of life, to enable us, out of any present good, to gather the utmost measure of enjoyment, by investing it with happy associations, and, in any present evil, to lighten it, by sommoning back the images of other hours; and also to give to all mental truths some visible type, in allegory, simile, or personification, which shall most deeply enforce them; and finally, when the mind is utterly outwearied, to refresh it with such innocent play as shall be most in harmony with the suggestive voices of natural things, permitting it to possess living companionship, instead of silent beauty, and create for itself fairies in the grass, and naiads in the wave.
10. Yet, because we thus reverence the power and art of imagination, let none of us despise the power and art of memory.

Let the reader consider seriously what he would give at any moment to have the power of arresting the fairest scenes, those which so often rise before him only to vanish; to stay the cloud in its fading, the leaf in its trembling, and the shadows in their changing; to bid the fitful foam be fixed upon the river, and the ripples be everlasting upon the lake; and then to bear away with him no darkness or feeble sun-stain, (though that is beautiful,) but a counterfeit which should seem no counterfeit-the true and perfect image of life indeed. Or rather, (for the full maj
esty of such a power is not thus sufficiently expressed, let him consider that it would be in effect nothing less than a capacity of transporting himself at any moment into any scene-a gift as great as can be possessed by a disembodied spirit; and suppose, also, this necromancy embracing not only the present but the past, and enabling us seemingly to enter into the very bodily presence of men long since gathered to the dust; to behold them in act as they lived; but, with greater privilege than ever was granted to the companions of those transiont acts of life, to see them fastened at our will in the gesture and expression of an instant, and stayed on the eve of some great deed, in immortality of burning purpose.-Conceive, so far as possible, such power as this, and then say whether the art which conferred it is to be spoken lightly of, or whether we should not rather reverence, as half divine, a gift which would go so far as to raise us into rank, invest us with the felicities of angels.*
11. I believe the first test of a truly great man is his humility. I do not mean by humility, doubt of his own power, or hesitation of speaking his opinions; but a right understanding of the relation between what he can do and say, and the rest of the world's sayings and doings. All great men not only know their business, but usually know that they know it; and are not only right in their main opinions, but they usually know that they are right in

[^18]them; only they do not think much of themselves on that account. Arnolfo knows he can build a good dome at Florence; Albert Durer writes calmly to one who has found fault with his work,_" It cannot be better done;" Sir Isaac Newton knows that he has worked out a problem or two that would have puzzled anybody else; only they do not expect their fellow-men, therefore, to fall down and worship them. They have a curious under-sense of powerlessness, feeling that the greatness is not in them, but through them; that they could not do or be anything else than God made them-and they see something divino and God-made in every other man they meet, and are endlessly, foolishly, incredibly merciful.
12. As far as I can observe, it is a constant law, that the greatest men, whether poets or historians, live entirely in their own age, and the greatest fruits of their work are gathered out of their own age. Dante paints Italy in the thirteenth century; Chaucer, England in the fourteenth; Masaccio, Florence in the fifteenth; Tintoret, Venice in the sixteenth; all of them utterly regardless of anachronism and minor error of every kind, but getting always vital truth out of the vital present. If it be said that Shakspeare wrote perfect historical plays on subjects belonging to the preceding centuries, I answer that they are perfect plays, just because there is no care about senturies in them, but a life which all men recognize for the human life of all time-and that it is, not because Shakspeare sought to give universal truth, but because paint
ing, honestly and completely, from the men about him, he painted that human nature which is indeed constant enough,-a rogue in the fifteenth century being at heart what a rogue is in the nineteenth, and was in the twelfth; and an honest or knightly man being in like manner very similar to other such at any other time. And the work of these great idealists is, therefore, always universal; not because it is not portrait, but because it is complete portrait down to the heart, which is the same in all ages; and the work of the mean idealist is not universal, not because it is portrait, but because it is half portrait-of the outside, the manners and the dress, not of the heart. Thus Tintoret and Shakspeare paint, both of them, simply Venetian and English nature, as they saw it in their time, down to the root; and it does for all time; but as for any care to cast themselves into the particular ways and tones of thought, or custom, of past time in their historical work, you will find it in neither of them,* nor in only other perfectly great man that I know of.
13. I think it probable that many readers may be surprised at my calling Scott the great representative of the mind of the age of literature. Those who can perceive

[^19]the intense penetrative depth of Wordsworth, and the exquisite finish and melodious power of Tenuyson, may be offended at my placing in higher rank that poetry of careless glance and reckless rhyme in which Scott poured out the fancies of his youth; and those who are familiar with the subtle analysis of the French novelists, or who have in any wise submitted themselves to the iufluence of German philosophy, may be equally indignant at my ascribing a principality to Scott among the literary men of Europe, in an age which has produced De Balzac, and Goethe.*

But the mass of sentimental literature concerned with the analysis and description of emotion, headed by the poetry of Byron, is altogether of lower rank than the literature which merely describes what it saw. The true seer fcels as intensely as any one else; but he does not much describe his feelings. He tells you whom he met, and what they said; leaves you to make out, from that, what they feel, and what he feels; but goes into little detail. And, generally speaking, pathetic writing and careful explanation of passion are quite easy, compared with this plain recording of what people said, and did, or with the right invention of what they are likely to say and

[^20]do; for this reason, that to invent a story, or admirably and thoroughly tell any part of a story, it is necessary to grasp the entire mind of every personage concerned in it, and know precisely how they would be affected by what happens; which to do, requires a collossal intellect; but to describe a separate emotion delicately, it is only needed that one should feel it oneself; and thousands of people are capable of feeling this or that noble emotion, for one who is able to enter into all the feelings of somebody sitting on the other side of the table. Even, therefore, where this sentimental literature is first rate, as in pas. sages of Byron, Tennyson, and Keats, it ought not to be ranked so high as the creative; and though perfection even in narrow fields is perhaps as rare as in the wider, and it may be as long before we have another "In Memoriam" as another "Guy Mannering," I unhesitatingly receive as a greater manifestation of power, the right invention of a few sentences spoken by Pleydell and Man. nering across their supper-table, than the most tender and passionate melodies of the self-examining verse.
14. Fancy plays like a squirrel in its circular prison, and is happy; but Imagination is a pilgrim on the earth -and her home is in heaven. Shut her from the fields of the celestial mountains, bear her from bseathing their lofty, sun-warmed air; and we may as well turn upon her the last bolt of the Tower of Famine, and give the keys
) the keeping of the wildest surge that washes Capraja und Gorgona.*
15. In the highest poetry, there is no word so familiar, but a great man will bring good out of it, or rather, it will bring good to him, and answer some end for which no other word would have done equally well. A common person, for instance, would be mightily puzzled to apply the word "whelp" to anyone, with a view of flattering him. There is a certain freshness and energy in the term, which gives it agreeableness, but it seems difficult, at first hearing it, to use it complimentarily. If the person spoken of be a prince, the difficulty seems increased; and when farther he is at one and the same moment to be called a "whelp" and complimented as a hero, it seems that a common idealist-might well be brought to a pause! But hear Shakspeare do it:-
> ** Awake his warlike spirit, And your great uncle's, Edward the Black Prince, Who on the French ground played a tragedy, Making defeat on the full power of France, While his most mighty father on a hill Stood smiling, to behold his lion's whelp Forage in blood of French nobility."
16. Although in all lovely nature there is, first an ex-. cellent degree of simple beauty, addressed to the eye

[^21]alone, yet often what impresses us most will form but a very small portion of that visible beauty. That beauty may, for instance, be composed of lovely flowers, and glittering streams, and blue sky and white clouds; and yet the thing that impresses us most, and which we should be sorriest to lose, may be a thin grey film on the extreme horizon, not so large, in the space of the scene it occupies, as a piece of gossamer on a near-at-hand bush, nor in any wise prettier to the eye than the gossamer; but because the gossamer is known by us for a little bit of spider's work, and the other grey film is known to mean a mountain of ten thousand feet high, inhabited by a race of noble mountaincers, we are solemnly impressed by the aspect of it , and yet all the while the thoughts and knowledge which cause us to receive this impression are so obscure that we are not conscious of them.
17. Examine the nature of your emotion (if you feel it, and at the sight of the Alps; and you find all the brightness of that emotion hanging, like dew on 2, gossamer, on a curious web of subtle fancy and imperfect knowledge. First you have a vague idea of its size, coupled with wonder at the work of the great Builder of its walls and fountains; then an apprehension of its eternity, a pathetic sense of its perpetualness, and your own transientness, as of the grass upon its sides;-then, and in very sadness, a sense of strange companionship with past generations, in seeing what they saw. They did not see the clouds that are floating over your head, nor
the cottage wall on the other side of the field, nor tho road by which you are travelling. But they saw that. The wall of granite in the heavens was the same to them as to you. They have ccased to look upon it; you will soon cease to look also, and the granite wall will be for others. Then, mingled with these more solemn imaginatious, come the understandings of the gifts and glories of the Alp;-the fancying forth of all the fountains that well from its rocky walls, and strong rivers that are born out of its ice, and of all the pleasant valleys that wind between its cliffs, and all the châlets that gleam among its clouds, and happy farmsteads couched upon its pastures; while, together with the thoughts of these, ries strange sympathies with all the unknown of human life, and happiness, and death, signified by that narrow white flame of the everlasting snow, seen so far in the morning sky. These images, and far more than these, lie at the root of the emotion which you feel at the sight of the Alps. Yet you may not trace them in your heart, for there is a great deal more in your heart, both of evil and good, than you can ever trace; but they stir you and quicken you for all that. Assuredly so far as you feel more at beholding the snowy mountain than any other object of the same sweet silvery grey, these are the kind of images which cause you to do so; and observe, these are nothing more than a greater apprehension of the facts of the thing. We call the power "Imagination," because it imagines or conceives; but it is only noble imagination, if it imagines or conceives the truth. And according to
the degree of knowledge possessed, and of sensibility to the pathetic or impressive character of the things known, will be the degree of this imaginative delight.
18. So natural is it to the human heart to fix itself in hope rather than in present possession, and so subtle is the charm which the imagination casts over what is distant or denied, that there is often a more touching power in the scenes which contain far-away promise of something greater than themselves, than in those which exhaust. the treasures and powers of nature in an unconquer. able and excellent glory, leaving nothing more to be by fancy pictured or pursued. I do not know that there is a district in the world more calculated to illustrate this power of the expectant imagination than that which surrounds the city of Friburg in Switzerland, extending from it towards Berne. It is of grey sandstone, considerably elevated, but presenting no object of striking interest to the passing traveller; so that as it is generally seen in the course of a hasty journey from the Bernese Alps to those of Savoy, it is rarely regarded with any other sensation than that of weariness, all the more painful because accompanied with reaction from the high excitement caused by the splendour of the Bernese Oberland. The traveller -foot-sore, feverish, and satiated with glacier and preci-pice-lies back in the corner of the diiigence, perceiving little more than that the road is winding and hilly, and the country through which it passes, cultivated and tame. Let him, however, ouly do this tame country the justice
of staying in it a few days, until his mind has recovered its tone, and take one or two long walks through its fields, and he will have other thoughts of it. It is, as I said, an undulating district of grey sandstone, never attaining any considerable height, but having enough of the mountain spirit to throw itself into continual succession of bold slope and dale; elevated, also, just far enough above the sea to render the pine a frequent forest tree along its irregular ridges. Through this elevated tract the river outs its way in a ravine some five or six hundred feet in depth, which winds for leagues between the gentle hills unthought of untilits edge is approached; and then, suddenly, through the boughs of the firs, the eye perceives, beneath, the green and gliding stream, and the broad walls of sandstone cliff ihat form its banks; hollowed out where the river leans against them at its turns, into perilous overhanging; and, on the other shore, 咕 the same spot, leaving little breadths of meadow between them and the water, half overgrown with thicket, deserted in their sweetness, inaccessible from above, and rarely visited by any curious wanderers along the hardly traceable footpath which struggles for existence beneath the rocks. And there the river ripples, and eddies and murmurs in an utter solitude. It is passing through a thiokly peopled country; but never was a stream so lonely. The feeblest and most far away torrent among the high hills has its companions ; the goats browse beside it; and the traveller drinks from it, and passes over it with his staff; and the peasant traces a new channel for it down to his mill-wheel. But this stream 2
has no companions; it flows on in an infinite seclusion, not secret, nor threatening, but a quietness of sweet daylight and open air-a broad space of tender and deep desolateness, drooped into repose out of the midst of human labour and life; the waves plashing lowly, with none to hear them; and the wild birds building in the boughs, with none to fray them away; and the soft, fragrant herbs rising and breathing and fading, with no hand to gather them-and yet all bright and bare to the clouds above, and to the fresh fall of the passing sunshine and pure rain. But above the brows of these scarped cliffs, all is in an instant changed. A few steps only beyond the firs that stretch their branches, angular, and white, like forks of lightning, into the air of the ravine-and we are in an arable country of the most perfect richness ; the swarthes of its corn glowing and burning from field to field; its pretty hamlets all vivid with fruitful orchards; and flowery gardens, and goodly with steep-roofed store-house and barn; its wellkept, hard, park-like roads rising and falling from hillside to hillside, or disappearing among brown banks of moss, and thickets of the wild raspberry and rose; or gleaming through lines of tall trees, half glede, half avenue, where the gate opens, or the gatelesss path turns trustedly aside, unhindered, into the garden of some statelier house, surrounded in rural pride with its golden hives, and carved granaries, and irregular domain of latticed and espaliered cottages, gladdening to look upon in their delicate homeli-ness-delicate, yet, in some sort, rude; not like our English homes-trim, laborious, formal, irreproachable in
comfort-but with a peculiar carelessness and largeness in all their detail, harmonizing with the outlawed loveliness of their country. For there is an untamed strength even in all that soft and habitable land. It is indeed gilded with corn, and fragrant with deep grass, but it is not subdued to the plough or to the scythe. It gives at its own free will; it seems to have nothing wrested from it, nor conquered in it. It is not redeemed from desertness, but unrestrained in fruitfulness,--generous land, bright with capricious plenty, and laughing from vale to vale in fitful fullness, kind and wild. Nor this without some sterner element mingled in the heart of it. For, along all its ridges stand the dark masses of innumerable pines,* taking no part in its gladness, asserting themselves for ever as fixed shadows, not to be pierced or banished even in the intensest sunlight; fallen flakes and fragments of the night, stayed in their solemn squares in the midst of all the rosy bendings of the orchard boughs and yellow effulgence of the harvest, and tracing themselves in black net-work and motionless fringes against the blanched blue of the horizon in its saintly clearness. And yet they do not sadden the landscape, but seem to have been set there chiefly to show how bright everything else is round them; and all the clouds look of pure silver, and all the air seems filled with a whiter and more living sunshine, where they are pierced by the sable points of the pines;

[^22]and all the pastures look of more glowing green where they run up between the purple trunks; and the sweet field footpaths skirt the edges of the forest for the salco of its shade, sloping up and down about the slippery roots, and losing themselves every now and then hopelessly among the violets and ground-ivy and brown sheddings of the fibrous leaves, and at last plunging into some open aisle, where the light through the distant stems shows that there is a chance of coming out again on the other side; and coming out indeed in a little while from the scented darkness into the dazzling air and marvellous landscape, which stretches still farther and farther in new wilfulness of grove and garden, until at last the craggy mountains of the Simmenthal rise out of $i t$, sharp into the rolling of the southern clouds.
19.* Although there are few districts of Northern Europe, however apparently dull or tame, in which I cannot find pleasure, though the whole of Northern France, (except Champagne), dull as it seems to most travellers, is to me a perpetual Paradise; and, putting Lincolnshire, Leicestershire, and one or two such other perfectly flat districts aside, there is not an English county which I should. not find entertainment in exploring the cross-roads of,

[^23]foot by foot,-yet all my best enjoyment would be owing to the imagination of the hills, colouring with their faraway memories every lowland stone and herb. The pleasant French coteau, green in the sunshine, delights me either by what real mountain character it has in itself, (for in extent and succession of promontory, the flanks of the French valleys have quite the sublimity of true mountain distances,) or by its broken ground and rugged steps among the vines, and rise of the leafage above against the blue sky, as it might rise at Vevay or Como. There is not a wave of the Seine, but is associated in my mind with the first rise of the sandstones and forest pines of Fon. tainebleau; and with the hope of the Alps, as one leaves Paris, with the horses' heads to the southwest, the morning sun flashing on the bright waves at Charenton. If there be no hope or association of this kind, and if I cannot deceive myself into fancying that perkaps at the next rise of the road there may be the film of a blue hill in the gleam of sky at the horizon, the landscape, however beautiful, produces in me even a kind of sickness and pain; and the whole view from Richmond Hill or Windsor Ter-race,-nay, the gardens of Alcinous, with their perpetual summer-or of the Hesperides, (if they were flat, and not close to Atlas), golden apples and all, I would give away in an instant, for one mossy granite stone a foot broad, and two leaves of lady fern.
20. I cannot find words to express the intense pleasure I hove always in first finding myself, after some prolonged
stay in England, at the foot of the old tower of Calais church. The large neglect, the noble unsightliness of it the record of its years written so visibly, yet without sign of weakness or decay; its stern wasteness and gloom, eaten away by the Channel winds, and overgrown with the bitter sea grasses; its slates and tiles all shaken and rent, and yet not falling; its desert of brickwork, full of bolts, and holes, and ugly fissures, and yet strung, like a bare brown rock; its carelessness of what any one thinks or feels about it, putting forth no claim, having no beauty, nor desireableness, pride, nor grace; yet neither asking for pity; not, as ruins are, useless and piteous, feebly or fondly garrulous of better days; but, useful still, going through its own daily work,-as some old fisherman, beaten grey by storm, yet drawing his daily nets, so it stands, with no complaint about its past youth, in blanched and meagre massiveness and serviceableness, gathering human souls together underneath it; the sound of its bells for prayer still rolling through its rents; and the grey peak of it seen far across the sea, principal of the three that rise above the waste of surfysand and hillocked shore,-the lighthouse for life, and the belfry for labour, and this,-for patience and praise.

I caunot tell the half of the strange pleasures and thoughts that come about me at the sight of that old tower; for, in some sort, it is the epitome of all that makes the continent of Europe interesting, as opposed to new countries; and, above all, it completcly expresses that agedness in the midst of active life which binds the old anc
the new into harmony. We in England have our new streets, our new inn-our green shaven lawn, and our piece of ruin emergent from it, a mere specimen of the middle ages put on a bit of velvet carpet, to be shown; and which, but for its size, might as well be on a museum shelf at once, under cover:-but, on the Continent, the links are unbroken between the past and present; and, in such use as they can serve for, the grey headed wrecks are suffered to stay with men; while, in unbroken line, the generations of spared buildings are seen succoeding, each in its place. And thus, in its largeness, in its permitted evidence of slow decline, in its poverty, in its absence of all pretence, of all show and care for outside aspect, that Calais tower has an infinite of symbolism in it, all the more striking because usually seen in contrast with English scenes expressive of feelings the exact reverse of these.*

* My friend won't write out the reverse! Our book is to be all ielly, and no powder, it seems. Well, I'm very thankful she liker the jelly,-at any rate it makes me sure that $i t$ is well made.


## SECTION III.

## ILLUSTRATIVE: THE SKY.

21. Ir is a strange thing how little in general people know about the sky. It is the part of creation in which Nature has done more for the sake of pleasing manmore for the sole and evident purpose of talking to him, and teaching him-than in any other of her works; and it is just the part in which we least attend to her. There are not many of her other works in which some more material or essential purpose than the mere pleasing of man is not answered by every part of their organization; but every essential purpose of the sky might, so far as we know, be answered if once in three days, or thereabouts, a great, ugly, black rain-cloud were brought up over the blue, and everything weh watered, and so all left blue again till next time, with perhaps a film of morning and evening mist for dew-and instead of this, there is not a moment of any day of our lives, when Na ture is not producing scene after scene, picture after picture, glory after glory, and working still upon such exquisite and constant principles of the most perfect beauty, that it is quite certain* it is all done for us, and

[^24]intended for our perpetual pleasure. And every man, wherever placed, however far from other sources of interest or of beauty, has this doing for him constantly. The noblest scenes of the earth can be seen and known but by few; it is not intended that man should live always in the midst of them; he injures them by his presence, he ceases to feel them if he is always with them; but the sky is for all: bright as it is, it is not
> " too bright nor good For human nature's daily food";
it is fitted in all its functions for the perpetual comfort and exalting of the heart,-for soothing it, and purifying it from its dross and dust. Sometimes gentle, sometimes capricious, sometimes awful-never the same for two moments together; almost human in its passions, almost spiritual in its tenderness, almost divine in its infinity, its appeal to what is immortal in us is as distinct as its ministry of chastisement or of blessing to what is mortal is essential. And yet we never attend to it, we never make it a subject of thought, but as it has to do with our animal sensations, we look upon all by which it speaks to us more clearly than to brutes, upon all which bears witness to the intention of the Supreme that we are to receive more from the covering vault than the light and the dew which we share with the weed and the worm, only as a succession of meaningless and monotonous accident, too common and too vain to be worthy of a moment of watchfulness, or a glance of admiration. If in our mo.
ments of utter idleness and insipidity, we turn to the sky as a last resource, which of its phenomena do we speak of? One says, it has been wet; and another, it has been windy, and another, it has been warm. Who among the whole chattering crowd can tell one of the forms and the. precipices of the chain of tall white mountains that girded the horizon-at noon yesterday? Who saw the narrow sunbeam that came out of the south, and smote upon their summits until they melted and mouldered away in a dust of blue rain? Who saw the dance of the dead clouds where the sunlight left them last night, and the west wind blew them before it like withered leaves? All has passed unregretted as unseen; or if the apathy be ever shaken off even for an instant, it is only by what is gross, or what is extraordinary. And yet it is not in the broad and fierce manifestations of the elemental energies, nor in the clash of the hail, nor the drift of the whirlwind, that the highest characters of the sublime are developed. God is not in the earthquake, nor in the fire, but in the still small voice. They are but the blunt and the low faculties of our nature, which can only be addressed through lamp-black and lightning. It is in quiet and unsubdued passages of unobtrusive majesty, the deep and the calm, and the perpetual; that which must be sought ere it is seen, and loved ere it is understood; things which the angels work out for us daily, and yet vary eternaliy; which are never wanting, and never repeater, which are to be found always, yet each found but
once; it is through these that the lesson of devotion is chiefly taught, and the blessing of beauty given.
22. We habitually think of the rain-cloud only as dark and grey; not knowing that we owe to it perhaps the fairest, though not the most dazzling, of the hues of heaven. Often in our English mornings, the rain-clouds in the dawn form soft, level fields, which melt imperceptibly into the blue; or, when of less extent, gather into apparent bars, crossing the sheets of broader clouds above; and all these bathed throughout in an unspeakable light of pure rose-colour, and purple, and amber, and blue; not shining, but misty-soft; the barred masses, when seen nearer, composed of clusters or tresses of cloud, like floss silk; looking as if each knot were a little swathe or sheaf of lighted rain.
23. Aqueous vapour or mist, suspended in the atmosphere, becomes visible exactly as dust does in the air of a room. In the shadows, you not only cannot see the dust itself, because unillumined, but you can see other objects through the dust, without obscurity; the air being thus actually rendered more transparent by a deprivation of light. Where a sunbeam enters, every particle of dust becomes visible, and a palpable interruption to the sight; so that a transverse sunbeam is a real obstacle to the vis-ion-you cannot see things slearly through it. In the same way, wherever vapour is illuminated by transverse rays, there it becomes visible as a whiteness more or less affecting the purity of the blue, and destroying it exactly
in proportion to the degree of illumination. But where vapour is in shade, it has very little effect on the sky, perhaps making it a little deeper and grayer than it otherwise would be, but not, itself, unless very dense, distinguishable or felt as mist.
24. Has the reader any distinct idea of what clouds are?

* That mist which lies in the morning so softly in the valley, level and white, through which the tops of the trees rise as if through an inundation-why is $i t$ so heavy, and why does it lie so low, being yet so thin and frail that it will melt away utterly into splendour of morning when the sun has shone on it but a few moments more? Those colossal pyramids, huge and firm, with outlines as of rocks, and strength to bear the beating of the high sun full on their fiery flanks,-why are they so light, their bases high over our heads, high over the heads of Alps? Why will these melt away, not as the sun rises, but as he descends, and leave the stars of twilight clear; while the valley vapour gains again upon the earth, like as shroud? Or that ghost of a cloud, which steals by yonder clump of pines; nay, which does not steal by them, but haunts them, wreathing yet round them, and yet,-and yet,-slowly; now falling in a fair waved line like a woman's veil; now fading, now gone; we look away for an instant, and look back, and it is again there. What has it to do with that clump of pines, that it broods by them, and waves itself

[^25]among their branches, to and fro? Has it hidden a cloudy treasure among the moss at their roots, which it watches thus? Or has some strong enchanter charmed it into fond returning, or bound it fast within those bars of bough? And yonder filmy crescent, bent like an archer's bow above the snowy summit, the highest of all the hillsthat white arch which never forms but over the supreme crest,-how it is stayed there, repelled apparently from the snow,-nowhere touching it, the clear sky seen between it and the mourtain edge, yet never leaving it-poised as a white bird hovers over its nest! Or those war clouds that gather on the horizon, dragon-crested, tongued with fire,-how is their barbed strength bridled? What bits are those they are champing with their vapourous lips, flinging off flakes of black foam? Lea,gued leviathans of the Sea of Heaven,-out of their nostrils goeth smoke, and their eyes are like the eyelids of the morning; the sword of him that layeth at them cannot hold the spear, the dart, nor the habergeon. Where ride the captains of their armies? Where are set the measures of their march? Fierce murmurers, answering each other from morning until evening-what rebuke is this which has awed them into peace;-what hand has reined them back by the way in which they came?

I know not if the reader will think at first that questions like these are easily answered. So far from it, I rather believe that some of the mysteries of the clouds never will be understood by us at all. "Knowest thou the balancing of the clouds?" Is the answer ever to be
one of pride? The wondrous works of Him, which is perfect in knowledge? Is our knowledge ever to be so?

For my own part, I enjoy the mystery, and perhaps the reader may. I think he ought. He should not be less grateful for summer rain, or see less beauty in the clouds of morning, because they come to prove him with hard questions; to which perhaps, if we look close at the heavenly scroll. we may find also a syllable or two of answer, illuminated here and there.*

And though the climates of the south and east may be comparatively clear, they are no more absolutely clear than our own northern air. Intense clearness, whether, in the north, after or before rain, or in some moments of twilight in the south, is always, as far as I am acquainted with natural phenomena, a notable thing. Mist of some sort, or mirage, or confusion of light or of cloud, are the gencral facts; the distance may vary in different climates at which the effects of mist begin, but they are always present; and therefore, in all probability, it is meant that we should enjoy them. . . . . . We surely need not wonder that mist and all its phenomena have been made delightful to us, since our happiness as thinking beings must depend on our being content to accept only partial knowledge even in those matters which chiefly concern us. If we insist upon perfect intelligibility and complete declaration in every moral subject, wo shall instantly fall into

[^26]misery of unbelief. Our whole happiness and power of energetic action depend upon our being able to breathe and live in the cloud; content to see it opening here, and closing there; rejoioing to catch through the thinnest films of it, glimpses of stable and substantial things; but yet perceiving a nobleness even in the concealment, and rejoicing that the kindly veil is spread where the untempered light might have scorched us, or the infinite clearness wearied. And I believe that the resentment of this interference of the mist is one of the forms of proud crror which are too easily mistaken for virtues. To be content in utter darkness and ignorance is indeed unmanly, and therefore we think that to love light and find knowledge must always be right. Yet (as in all matters before observed,) wherever pride has any share in the work, ever knowledge and light may be ill pursued. Knowledge is good, and light is good; yet man perished in seeking knowledge, and moths perish in seeking light; and if we, who are crushed before the moth, will not accept such mystery as is needful to us, we shall perish in like manner. But, accepted in humbleness, it instantly becomes an element of pleasure; and I think that every rightly constituted mind ought to rejoioe, not so much in knowing any thing clearly, as in feeling that there is infinitely more which it cannot know. None but proud or weak men would mourn over this, for we may always know more if we choose, by working on; but the pleasure is, I think, to humble people, in knowing that the journey is endless, the treasure inexhaustib'e,-watching the cloud
still march before them with its summitless pillar, and being sure that, to the end of time, and to the length of cternity, the mysteries of its infinity will still open farther and farther, their dimness being the sign and necessary adjunct of their inexhaustibleness. I know there are an evil mystery, and a deathful dimness,-the mystery of a great Babylon-the dimness of the sealed eye and soul; but do not let us confuse these with the glorious mystery of the things which the angels "desire to look into," or with the dimness which, even before the clear eye and open soul, still rests on sealed pages of the cternal volume.
25. On some isolated mountain at daybreak,* when the night mists first rise from off the plain, watch their white and lake-like fields, as they float in level bays, and winding gulfs about the islanded summits of the lower hills, untouched yet by more than dawn, colder and more quiet than a windless sea under the moon of midnight; watch when the first sunbeam is sent upon the silver channels, how the foam of their undulating surface parts, and passes away, and down under their depths the glittering city and greeu pasture lie like Atlantas, between the white paths of winding rivers; the flakes of light falling every

[^27]moment faster and broader among the starry spires, as the wreathed surges break and vanish above them, and the confused crests and ridges of the dark hills shorten their grey shadows upon the plain. Wait a little longer, and you shall see those scattered mists rallying in the ravines, and floating up towards you, along the winding valleys, till they couch in quiet masses, iridescent with the morning light, upon the broad breasts of the higher hills, whose leagues of massy undulation will melt back, back into that robe oi material light, until they fade away, and set in its lustre, to appear again above in the serene heaven like a wild, bright, impossible dream, foundationless, and inaccessible, their very base vanishing in the unsubstantial and making blue of the deep lake below. Wait yet a little longer, and you shall see those mists gather themselves into white towers, and stand like fortresses along the promontories, massy and motionless, only piled with every instant higher and higher into the sky, and casting longer shadows athwart the rocks; and out of the pale blue of the horizon you will see forming and advancing a tromp of narrow, dark, pointed vapours, which will cover the sky, inch by inch, with their grey network, and take the light off the landscape with an eclipse which will stop the singing of the birds, and the motion of the leaves, together;-and then you will see horizontal bars of black shadow forming under them, and lurid wreaths create themselves, you know not how, among the shoulders of the hills; you never see them form, but when you look back to a place which was clear
an instant ago, there is a cloud on it, hanging by the precipice, as a bawk pauses over his prey;-and then you will hear the sudden rush of the awakened wind, and you will see those watch-towers of vapour swept away from thcir foundations, and waving curtains of opaque rain let down to the valley, swinging from the burdenod clouds in black bending fringes, or, pacing in pale columns along the lake level, grazing its surface into foam as they go. And then as the sun sinks, you shall see the storm drift for an instant from off the hills, leaving their broad sides smoking and loaded yet with suow-white, torn, steamlike rags of capricious vapour, now gone, now gathered again,-while the smouldering sun, seeming not far away, but burning like a red-hot ball beside you, and as if you could reach it, plunges through the rushing wind and rolling cloud with headlong fall, as if it meant to rise no more, dyeing all the air about it with blood;-and then you shall hear the fainting tempest die in the hollow of the night, and you shall see a green halo kindling on the summit of the eastern hills, brighter, brighter yet, till the large white circle of the slow moon is lifted up among the barred clouds, step by step, line by line; star after star she querches with her kindling light, setting in thcir stead an army of pale, penetrable, fleecy wreaths in the heaven, to give light upon the earth, which move together hand in hand, company by company, troop by troop, so measurcd in their unity of motion that the whole heaven seems to roll with them, and the earth to reel under them. And then wait yet for one hour, until the
east again becomes purole, and the heaving mountains, rolling against it in darkness, like waves of a wild sea, are drowned one by one in the glory of its burning; watch the white glaziers blaze in their winding paths about the mountains, like mighty serpents with scales of fire: watch the columnar peaks of solitary snow, kindling downwards chasm by chasm, each in itself a new morning-their long avalanches cast down in keen streams brighter than the lightning, sending each his tribute of driven snow, like altar-smoke up to heaven; the rose-light of their silent domes flushing that heaven about them, and above them, piercing with purer light through its purple lines of lifted cloud, casting a new glory on every wreath, as it passes by, until the whole heaven, one scarlet canopy, is interwoven with a roof of waving flame, and tossing vault beyond vault, as with the drifted wings of many companies of angels: and then when you can look no more for gladness, and when you are bowed down with fear and love of the Maker and Doer of this, tell me who has best delivered this His message unto men!
26. *The account given of the stages of creation in the first chapter of Genesis is in every respect clear and intelligible to the simplest reader, except in the statement of the work of the second day. I suppose that this state ment is passed over by carcless readers without any en-

[^28]deavor $t$ understand it, and contemplated by simple and faithful readers as a sublime mystery which was not intended to be understood. But there is no mystery in any other part of the chapter, and it seems to me unjust to conclude that any was intended here. And the passage ought to be peculiarly interesting to us, as being the first in the Bible in which the heavens are named, and the only one in which the word "Heaven," all important as that word is to our understanding of the most precious promises of Scripture, receives a definite explanation. Let us therefore see whether, by a little careful comparison of the verse with other passages in which the word occurs, we may not be able to arrive at as clear an understanding of this portion of the chapter as of the rest. In the first place the English word, "Firmament" itself is obscure and useless; because we never employ it but as a synonym of heaven, it conveys no other distinct idea to us; and the verse, though from our familiarity with it we imagine that it possesses meaning, has in reality no more point nor value than if it were written, "God said, Let there be a something in the midst of the waters, and God called the something, Heaven." But the marginal reading, "Expansion," has definite value; and the statement that God said, Let there be an expansion in the midst of the waters, and "God called the expansion, Heaven," has an apprehensible meaning. Accepting this expression as the one intended, we have next to ask what expansion there is, hetween two waters, describable by the term heaven. Milton adopts the term "expanse," but he understands it of the whole
volume of the air which surrounds the earth- Whereas, so far as we can tell, there is no water beyond the air, in the fields of space; and the whole expression of division of waters from waters is thus rendered valueless. Now with respect to this whole chapter, we must rememher always that it is intended for the instruction of all mankind, not for the learned reader only; and that therefore the most simple and natural interruption is the likeliest in general to be the true one. An unscientific reader knows little about the manner in which the volume of the atmosphere surrounds the earth; but I inagine that he could hardly glance at the sky when rain was falling in the distance, and see the level line of the bases of the clouds from which the shower descended, without being able to attach an instant and easy meaning to the words, "expansion in the midst of the waters;" and if, having once seized this idea, he proceeded to examine it more accurately, he would perceive at once, if he had ever noticed anything of the nature of clouds, that the level line of their bases did indeed most severely and stringently divide "waters from waters"-that is to say, divide water in its collective and tangible state, from water in its aërial state; or the waters which fall, and flow, from those which rise, and foat. Next, if we try this interpretation in the theological sense of the word heaven, and examine whether the clouds are spoken of as God's dwelling place, we find God going before the Israelites in a pillar of cloud; revealing Himself in a cloud on the mercy-seat, filling the Temple of Solomon with the cloud when its dedication is accepted; appearing in a greas ${ }^{1}$
cloud to Ezekiel; ascending into a cloud before the eyes of the disciples on Mount Olivet; and in like manner return. ing to judgment: "Behold he cometh with clouds, and every eye shall see him." "Then shall they see the Son of Man coming in the clouds of heaven, with power and great glory." While further the "clouds" and "heavens" are used as interchangeable words in those Psalms which most distinctly set forth the power of God: "He bowed the heavens also, and came down; he made darkness pavillians round about him, dark waters, and thick clouds of the skies." And again, "Thy mercy, O Lord, is in the heavens, and thy faithfulness reacheth unto the clouds." And again, "His excellency is over Israel, and his strength is in the clouds." And again, "The clouds poured out water, the skies sent out a sound, the voice of thy thunder was in the heaven." Again, "Clouds and darkness are round about him, righteousness and judgment are the babitation of his throne; the heavens declare his righteousness, and all the people see his glory." In all these passages the meaning is unmistaikable if they possess definite meaning at all. We are too apt to take them merely for sublime and vague imagery, and therefore gradually to lose the apprebension of their life and power. The expression, "He bowed the heavens," for instance, is, I suppose, received by most readers as a magnificent hyperbole, having reference to some peculiar and fearful manifestation of God's power to the writer of the Psalm in which the words occur. But the expression eitber has plain meaning, or it has no meaning. Understand by the term
"heavens" the compass of infinite space around the carth and the expression "bowed the heavens," however sublime, is wholly without meaning: infinite space cannot be bent or bowed. But understand by the "heavens" the veil of clouds abovè the earth, and the expression is neither hyperbolical nor obscure; it is pure, plain, accurate truth, and it describes God, not as revealing Himself in any peculiar way to David, but doing what He is still doing before our own eyes, day by day. By accepting the words in their simple sense, we are thus led to apprehend the immediate presence of the Diety, and His purpose of manifesting Himself as near us whenever the storm-cloud stoops upon its course; while by our vague and inaccurate acceptance of the words, we remove the idea of His presence far from us, into a region which we can neither see nor know : and gradually, from the close realization of a living God, who "maketh the clouds his chariot," we define and explain ourselves into dim and distant suspicion of an inactive God inhabiting inconceivable places, and fading into the multitudinous formalisms of the laws of Nature. All errors of this kind-and in the present day we are in constant and grievous danger of falling into them-arise from the originally mistaken idea that man can, "by searching, find out God-find out the Almighty to per-fection"-that is to say, by help of courses of reasoning and accumulations of science, apprehend the nature of the Deity, in a more exalted and more accurate manner than in a state of comparative ignorance; whereas it is clearly necessary, from the beginning to the end of time, that

God's way of revealing Himself to His creatures should be a simpls way, which all those creatures may understand. Whether taught or untaught, whether of mean capacity or enlarged, it is necessary that communicn with their Creator should be possible to all; and the admission to such communion must be rested, not on their having a knowledge of astronomy, but on their having a human soul. In order to render this communion possible, the Deity has stooped from His throne, and has, not only in the person of the Son, taken upon Him the veil of our human flesh, but, in the person of the Father, taken upon Him the veil of our human thoughts, and permitied us, by His own spoken authority, to conceive Him simply and clearly as a loving father and friend; a being to be walked with and reasoned with, to be moved by our entreaties, angered by our rebellion, alienated by our coldness, pleased by our love, and glorified by our labour; and finally to be beheld in immediate and active presence in all the powers and changes of creation. This conception of God, which is the child's, is evidently the only one which can be universal, and, therefore, the only one which for us can be true. The moment that, in our pride of heart, we refuse to accept the condescension of the Almighty, and desire Him, instead of stooping to hold our hands, to rise up before us into His glory, we, hoping that, by standing on a grain of dust or two of human knowledge highes than our fellows, we may behold the Creator as He rises, -God takes us at our word. He rises, into His own invisible and inconceivable majesty; He goes forth upon
the ways which are not our ways, and retires into the thoughts which are not our thoughts; and we are left alone. And presently we say in our vain hearts, "There is no God."

I would desire, therefore, to receive God's account of His own creation as under the ordinary limits of human knowledge and imagination it would be received by a simply minded man; and finding that the "heavens and the earth" are spoken of always as having something like equal relation to each other, ("Thus the heavens and the earth were finished, and all the host of them,") I reject at once all idea of the term "heavens" being intended to signify the infinity of space inhabited by countless worlds; for between those infinite heavens and the particle of sand, which not the earth only, but the sun itself, with all the solar system, is, in relation to them, no relation of equality or comparison could be inferred. But I suppose the heavens to mean that part of creation which holds equal companionship with our globe; I understand the "rolling of these heavens together as a scroll," to be an equal and relative destruction with the melting of the elements in fervent heat; and I understand the making of the firmament to signify that, so far as man is concerned, most magnificent ordinance of the clouds;-the ordinance that as the great plain of waters was formed on the face of the earth, so also a plain of waters should be stretched along the height of air, and the face of the cloud answer the face of the ocean; and that this upper and heavenly plain should be of waters, as it were, glorified in their nature,
no longer quenching the fire, but now bearing fire in their own bosoms; no longer murmuring only when the winds raise them or rocks divide, but answering each other with their own voices, from pole to pole; no longer restrained by established shores, and guided through unchanging channels ; but going forth at their pleasure like the armies of the angels, and choosing their encampments upon the heights of the hills; no longer hurried downwards for ever, moving but to fall, nor lost in the lightless accumulation of the abyss, but covering the east and west with the waving of their wings, and robing the gloom of the farther infinite with a vesture of diverse colours, of which the threads are purple and scarlet, and the embroideries flame.

This I believe is the ordinance of the firmament; and it seems to me that in the midst of the material nearness of these heavens, God means us to acknowledge His own immediate presence as visiting, judging, and blessing us: "The earth shook, the heavens also dropped at the presence of God." "He doth set his bow in the clouds," and thus renews, in the sound of every drooping swathe of rain, His promises of everlasting love. "In them he hath set a tabernacle for the sun;" whose burning ball, which, without the firmanent, would be seen but as an intolerable and scorching circle in blackness of vacuity, is by that firmament surrounded with gorgeous service, and tempered by mediatorial ministries: by the firmament of clouds the temple is built, for his presence to fill with light at noon; by the firmament of clouds the purple veil is closed at
evening, round the sanctuary of his rest; by the mists of the firmament his implacable light is divided, and its separated fierceness appeased into the soft blue that fills the depth of distance with its bloom, and the flush with which the mountains burn, as they drink the overflowing of the dayspring. And in this tabernacling of the unendurable sun with men, through the shadows of the firmament, God would seem to set forth the stooping of His own Majesty to men, upon the throne of the firmament. As the Creator of all the worlds, and the Inhabiter of cternity, we cannot behold Him; but as the Judge of the earth and the Preserver of men, those heavens are indeed His dwelling place: "Swear not, neither by heaven, for it is God's throne ; nor by the earth, for it is his footstool !" And all of those passings to and fro of fruitful showers and grateful shade, and all those visions of silver palaces built about the horizon, and voices of moaning winds and threatening thunders, and glories of coloured robe and cloven ray, are but to deepen in our hearts the acceptance, and distinctness, and dearness, of the simple words, "Our Father, which art in heaven."

## SECTION IV.

## ILlustrative: Streams and sea.

27. Of all inorganic substances, acting in their own proper nature, and without assistance or combination, water is the most wonderful. If we think of it as the source of all the changefulness and beauty which we have seen in clouds-then, as the instrumeni by which the earth we have contemplated was modelled into symmetry, and its crags chiselled into grace;-then, as in the form of snow, it robes the mountains it has made with that transcendent light which we could not have conceived if we had not seen;-then as it exists in the foam of the torrent, in the iris which spans it, in the morning mist which rises from it, in the deep chrystalline pools which mirror its hanging shore, in the broad lake and glancing river-finally, in that which is to all human minds the best emblem of unwearied, unconquerable power, the wild, various, fantastic, tameless unity of the sea;-what shall we compare to this mighty, this universal element, for glory or beauty? or how shall we follow its eternal changefulness of feeling? It is like trying to paint a soul!
28. The great angel of the sea-rain; the angel, ob-serve,-the messenger sent to a special place on a special errand. Not the diffused, perpetual presence of the bur-
den of mist, but the going and returning of the intermittent cloud. All turns upon that intermittence. Soft moss on stone and rock; cave fern of tangled glen; wayside well-perennial, patient, silent, clear, stealing through its square font of rough-hewn stone; ever thus deep, no more-which the winter wreck sullies not, the summer thirst wastes not, incapable of stain as of decline-where the fallen leaf floats undecayed, and the insect darts undefiling: crossed brook and ever eddying river, lifted even in flood scarcely over its stepping stones,-but through all sweet summer keeping tremulous music with harpstrings of dark water among the silver fingering of the pebbles. Far away in the south the strong river gods have all hasted, and gone down to the sea. Wasted and burning, white furnaces of blasting sand, their broad beds lie ghastly and bare; but here in the moss lands, the soft wings of the sea angel droop still with dew, and the shadows of their plumes falter on the hills; strange laughings and glitterings of silver streamlets, born suddenly, and twined about the mossy heights in trickling tinsel, answering to them as they wave.
29. Stand for half an hour beside the fall of Schaff hausen, on the north side, where the rapids are long, and watch how the vault of water. first bends unbroken, in pure polished velocity, over the arching rocks at the brow of the cataract, covering them with a dome of chrystal twenty feet thick, so swift that its motion is unseen except when a foam globe from above darts over it like a
falling star; and how the trees are lighted above it undes all their leaves,* at the instant that it breaks into foam; and how all the hollows of that foam burn with green fire like so much shattering chrysoprase; and how, ever and anon startling you with its white flash, a jet of spray leaps hissing out of the fall, like a rocket, bursting in the wind and driven away in the dust, filling the air with light; and how through the curdling wreaths of the restless crashing abyss below, the blue of the water, paled by the foam in its body, shows purer than the sky through white rain-cloud, while the shuddering iris stoops in tremulous stillness over all, fading and flushing alternately through the choking spray and shattered sunshine, hiding itself at last among the thick golden leaves which toss to and fro in sympathy with the wild water,-their dripping mosses liftcd at intervals, like sheaves of loaded corn, by some stronger gush from the cataraot, and bowed again upon the mossy rocks as its roar dies away,-the dew gushing from their thick branches through drooping clusters of emerald herbage, and sparkling in white threads along the dark rocks of the shore, feeding the lichens, which chase and chequer them with purple and silver
30. Close beside the path by which travellers ascend the Montanvert from the valley of Chamouni, on the right hand, where it first begins to rise among the pines, there

[^29]descends a small stream from the foot of the granite peak known to the guides as the Aiguille Charmoz. It is concealed from the traveller by a thicket of alder, and its murmur is hardly heard, for it is one of the weakest streams of the valley. But it is a constant stream, fed by a permanent, though small, glacier; and continuing to flow even to the close of summer, when more copious torrents, depending only on the melting of the lower snows, have left their beds, -"stony channels in the sun." The long drought which took place in the autumn of 1854, sealing every source of waters except these perpetual ones, left the torrent of which I am speaking, and such others, in a state peculiarly favourable to observance of their least action on the mountains from which they descend. Thiey were entirely limited to their own ice fountains, and the quantity of powdered rock which they brought down was, of course, at its minimum, being nearly unmingled with any earth derived from the dissolution of softer soil, or vegetable mould, by rains. At three in the afternoon, on a warm day in September, when the torrent had reached its average maximum strength for the day, I filled an ordinary Bordeaux wine flask with the water where it was least turbid. From this quart of water I obtained twentyfour grains of sand and sediment more or less fine. I cannot estimate the quantity of water in the stream; but the runlet of it at which I filled the flask was giving about two hundred bottles a minute, or rather more, carrying down, therefore, about three quarters of a pound of powdered granite every minute. This would be forty-five pounds
an hour; but allowing for the inferior power of the stream in the cooler periods of the day, and taking into considera tion, on the other side, its increased power in rain, we may, I think, estimate its average hour's work at twenty-eight or thirty pounds, or a hundred weight every four hours. By this insignificant runlet, therefore, rather more than two tons of the substance of the Mount Blane are displaced and carried down a certain distance every week; and, as it is only for three or four months that the flow of the stream is checked by frost, we may certainly allow eighty tons for the mass which it annually moves. It is not worth while to enter into any calculation of the relation born by this runlet to the great torrents which descend from the chain of Mont Blanc into the valley of Chamouni.* I but take this quantity, eighty tons, as the result of the labour of a scarcely noticeable runlet at the side of one of them, utterly irrespective of all sudden falls of stones and of masses of mountain (a single thunderbolt will somesomes leave a scar on the flank of a soft rock looking like a trench for a railroad), and we shall then begin to apprehend something of the operation of the great laws of change which are the conditions of all material existence, however apparently enduring. The hills, which as compared with living beings seem "everlasting," are in truth as perishing as they; its veins of flowing fountain weary the mountain heart, as the crimson pulse does ours; the

[^30]natural form of the iron crag is abated in its appointed time, like the strength of the sinews in a human old age; and it is but the lapse of the longer years of decay which, in the sight of its Creator, distinguishes the matntain range from the moth and the worm.
31. Few people, comparatively, have ever seen the effect on the sea of a powerful gale continued without intermission for three or four days and nights; and to those who have not, I believe it must be unimaginable, not from the mere force or size of surge, but from the complete annihilation of the limit between sea and air. The water, from its prolonged agitation, is beaten, not into mere creamy foam, but into masses of accumulated yeast, which hang in ropes and wreaths from wave to wave; and where one curls over to break, form a festoon like a drapery from its edge; these are taken up by the wind,-not in dissipating dust, but bodily, in writhing, hanging, coiling masses, which make the air white and thick as with snow, only the flakes are a foot or two long each; the surges themselves are full of foam in their very bodies, underneath, making them white all through, as the water is under a great cataract,-and their masses being thus half water and half air, are torn to pieces by the wind whenever they rise, and carried away in roaring smoke, which chokes and strangles like actual water. Add to this, that when the air has been exhausted of its moisture by long rain, the spray of the sea is caught by it as described above, and covers its suface not merely with the smoke
of finely divided water, but with boiling mist: imagine also the low rain-clouds brought down to the very level of the sea, as I have often seen them, whirling and flying in rags and fragments from wave to wave; and finally conceive the surges themselves in their utmost pitch of power, velocity, vastness and madness, lifting themselves in precipices and peaks furrowed with their whirl of ascent, through all this chaos; and you will understand that there is indeed no distinction left between the sea and air; that no object, nor horizon, nor any landmark, or natural evidence of position is left; that the heaven is all spray, and the ocean all cloud, and that you can see no further in any direction than you could see through a cataract.*

[^31]
## SECTION $\nabla$.

## ILLUSTRATIVE: MOUNTAINS.

32. The words which marked for us the purpose of the clouds are followed immediately by those cotable ones,-"And God said, Let the waters which are under the heavens be gathered together into one place, and let the dry land appear." We do not, perhaps, often enough consider the deep signification of this sentence. We are too apt to receive it as the description of an event vaster only in its extent, not in its nature, than the compelling of the Red Sea to draw back that Israel might pass by. We imagine the Deity in like manner rolling the waves of the greater ocean together on an heap, and setting bars and doors to them eternally. But there is a far deeper meaning than this in the solemn words of Genesis, and in the correspondent verse of the Psalm, "His hands prepared the dry land." Up to that moment the earth had been void; for it had been without form. The command that the waters should be gathered, was the command that the earth should be sculptured. The sea was not driven to its place in suddenly restrained rebellion, but withdrawn to its place in perfect and patient obedience. The dry land appeared, not in level sands forsaken by the surges, which those surges might again claim for their own; but in range beyond range of swelling hills and
iron rocks, forever to claim kindred with the firmament, and be companioned by the clouds of heaven.

What space of time was in reality occupied by the "lay " of Genesis, is not at present of any importance for us to consider. By what furnaces of fire the adamant was melted, and by what wheels of earthquake it was torn, and by what teeth of glacier and weight of sea-waves it was engraven and finished into its perfect form, we may, perhaps, hereafter endeavor to conjecture; but here, as in few words the work is summed by the Historian, so in few broad thoughts it should be comprehended by us; and, as we read the mighty sentence, "Let the dry land appear," we should try to follow the finger of God as it engraved upon the stone tables of the earth the letters and the law of its everlasting form, as gulf by grlf the channels of the deep were ploughed; and cape by cape the lines were traced with Divine foreknowledge of the shores that were to limit the nations; and chain by chain the mountain walls were lengthened forth, and their foundations fastened forever; and the compass was set upon the face of the depth, and the fields and the highest part of the dust of the world were made; and the right hand of Christ first strewed the snow on Lebanon and smoothed the slopes of Calvary.

It is not, I repeat, always needful, in many respects it is not possible, to conjecture the manner or the time in which this work was done; but it is deeply necessary for all men to consider the magnificence of the accomplished purpose, and the depth of the wisdom and love which are
manifested in the ordinances of the hills. For observe, in order to bring the world into the form which it now bears, it was not mere sculpture that was needed; the mountains could not stand for a day unless they were formed of materials altogether different from those which constitute the lower hills, and the surfaces of the valleys. A harder substance had to be prepared for every mountain chain, yet not so hard but that it might be capable of crumbling down into earth fit to nourish the Alpine forest, and the Alpine flower; not so hard but that in the midst of the utmost majesty of its enthroned strength there should be seen on it the seal of death, and the writing of the same sentence that had gone forth against the human frame, "Dust thou art, and unto dust shalt thou return." And with this perishable substance the most majestic forms were to be framed that were consistent with the safety of man; and the peak was to be lifted and the cliff rent as high and as steeply as was possible, in order yet to permit the shepherd to feed his flocks upon the slopes, and the cottage to nestle beneath their shadow. And observe, two distinct ends were to be accomplished in doing this. It was indeed absolutely necessary that such eminences should be created, in order to fit the earth in any wise for human habitation, for without mountains the air could not be purified, nor the flowing of the rivers sustained, and the earth must have become for the most part plain, or stagnant marsh. But the feeding of the rivers and the purifying of the winds, are the least of the services appointed to the hills. To fill the thirst of the
human heart for the beauty of God's working-to startle its lethargy with the deep and pure agitation of astonish ment,--are their higher missions. They are as a great and noble architecture, first giving shelter, comfort, and rest; and covered also with mighty sculpture and painted legend. It is impossible to examine in their connected system, the features of even the most ordinary mountain scenery, without concluding that is has been prepared in order to unite as far as possible, and in the closest compass, every means of delighting and sanctifying the heart of man, "as far as possible,"-that is, as far as is consistent with the fulfilment of the sentence of condemnation on the whole earth. Death must be upon the hills; and the cruelty of the tempests smite them, and the briar and thorn spring up upon them; but they so smite as to bring their rocks into the fairest forms, and so spriug as to make the very desert blossom as the rose. Even among our own hills of Scotland and Cumberland, though often too barren to be perfectly beautiful, and always too low to be perfectly sublime, it is strange how many deep sources of delight are gathered into the compass of their glens and vales; and how, down to the most secret clus. ter of their far away flowers, and the idlest leap of their straying streamlets, the whole heart of nature seems thirsting to give, and still to give, shedding forth her ever lasting benificence with a profusion so patient, so passion nte, that our utmost observance and thankfulness are but, at last, neglects of her nobleness, and apathy to her love. But among the true mountains of the greater orders, the

Divine purpose of appeal at once to all the faculties of the human spirit becomes still more manifest. Inferior hills ordinarily interrupt, in some degree, the richness of the valleys at their feet; the grey downs of southern Eng. land and treeless côtaux of Central France, and grey swells of Scottish moor, whatever peculiar charm they may possess in themselves, are at least destitute of those which belong to the woods and fields of the lowlands. But the great mountains lift the lowlands on their sides. Let the reader imagine first the appearance of the most varied plain of some richly cultivated country; let him imagine it dark with graceful woods, and soft with deepest pastures; let him fill the space of it, to the utmost horizon, with innumerable and changeful incidents of scenery and life; lcading pleasant streamlets through its meadows, strewing clusters of cottages beside their banks, tracing sweet footpaths through its avenues, and animating its fields with happy flocks, and slow wandering spots of cattle; and when he has wearied himself with endless imagining, and left no space without some loveliness of its own, let him conceive all this great plain, with its infinite treasures of natural beauty, and happy human life, gathered up in God's hands from one edge of the horizon to the other, like a woven garment, and shaken into deep falling folds, as the robes droop from a king's shoulders; all its bright rivers leaping into cataracts along the holiows of its fall, and all its forests rearing themselves aslant against its slopes, as a rider rears himself back when his hoi se plunges, and all its villages nestling themselves into the new wind
ings of its glens, and all its pastures thrown into steer waves of green sward, dashed with dew along the edges of their folds, and sweeping down into endless slopes, with a cloud here and there lying quietly, half on the grass, half in the air,-and he will have as yet in all this lifted world, only the foundation of one of the great Alps. And whatever is lovely in the lowland scenery, becomes lovelicr in this change; the trees grew heavily and stiffly from the level line of plain, assume strange curves of strength and grace as they bend themselves against the mountain side; they breathe more freely and toss their branches more carelessly as each climbs higher, looking to the clear light above the topmost leaves of its brother tree, the flowers which on the arable plains fall before the plough, now find out for themselves unapproachable places, where year by year they gather into happier fellowship and fear no evil; and the streams which in the level land crept in dark eddies by unwholsome banks, now move in showers of silver, and are clothed with rainbows, and bring health and life wherever the glance of their waves can reach.

It may not, therefore, be altogether profitless or unnecessary to review briefly the nature of the three great offices which mountain ranges are appointed to fulfil, in order to preserve the health and increase the happiness of mankind. Their first use is, of course, to give motion to water. Every fountain and river, from the inch-deep streamlet that crosses the village lane in trembling clearness, to the massy and silent march of the everlasting
multitude of waters in Amazon or Ganges, owe their play, and purity, and power, to the ordained elevations of the earth. Gentle or steep, extended or abrupt, some determined slope of the earth's surface is of course necessary before any wave can so much as overtake one sedge in its pilgrimage; and how seldom do we enough consider, as we walk beside the margins of our pleasant brooks, how beautiful and wonderful is that ordinance, of which every blade of grass that waves in their clear waters is a perpetual sign-that the dew and rain fallen on the face of the earth shall find no resting place; shall find, on the contrary, fixed channels traced for them from the ravines of the central crests down which they roar, in sudden ranks of foam, to the dark hollows beneath the banks of lowland pasture, round which they must circle-slowly among the stems and beneath the leaves of the lilies; paths prepared for them by which, at some appointed rate of journey, they must evermore descend, sometimes slow, and sometimes swift, but never pausing; the daily portion of the earth they have to glide over marked for them at each successive sunrise, the place which has known them knowing them no more, and the gateways of guarding mountains opened for them in cleft and chasm, none letting them in their pilgrimage; and, from afar off, the great heart of the sea calling them to itself! "Deep calleth unto deep." I. know not which of the two is more wonderful,-that calm, gradated, invisible slope of the champaign land, which gives motion to the stream; or that passage cloven for it through the ranks of hill, which
necessary for the health of the land immediately around them, would yet, unless so supernaturally divided, have fatally intercepted the flow of the waters from far off countries. When did the great spirit of the river first knock at these adamantine gates? When did the porter open to it, and cast his key away forever, lapped in whirling sand? I am not satisfied-no one should be satisfiedwith that vague answer, The river cut its way. Not so. The river found its way. * I do not see that rivers in their own strength can do much in cutting their way; they are nearly as apt to choke their channels up as to carve them out. Only give a river some little sudden power in a valley, and see how it will use it. Cut itself a bed? .Not so, by any means, but fill up its bed; and look for another in a wild, dissatisfied, inconsistent man-ner,-any way rather than the old one will better please it; and even if it is banked up and forced to keep to the old one, it will not deepen, but do all it can to raise it, and leap out of it. And although wherever water has a stecp fall it will swiftly cut itself a bed deep into the rock or ground, it will not, when the rock is hard, cut a wider channel than it actually needs; so that if the existing river beds, through ranges of mountain, had in reality been cut by the streams, they would be found, wherever the rocks are hard, only in the form of narrow and profound ravines, like the well-known channel of the Niagara

[^32]below the fall; not in that of extended valleys. And the actual work of true mountain rivers, though often much greater in proportion to their body of water than that of the Niagara, is quite insignificant when compared with the area and depth of the valleys through which they flow ; so that although in many cases it appears that those larger valleys have been excavated at earlier periods by more powerful streams, or by the existing stream in a more powerful condition, still the great fact remains always equally plain, and equally admirable, that, whatever the nature and duration of the agencies employed, the earth was so shaped at first as to direct the currents of its rivers in the manner most healthy and convenient for man. The valley of the Rhone may have been in great part excavated, in early times, by torrents a thousand times larger than the Rhone; but it could not have been excavated at all, unless the mountains had bcen thrown at first into two chains, by which the torrents were set to work in a given direction. And it is easy to conceive how, under any less beneficent dispositions of their masses of hill, the continents of the earth might either have been covered with enormous lakes, as parts of North America actually are covered; or have become wildernesses of pestiferous marsh; or lifeless plains, upon which the water would have dried as it fell, leaving them for great part of the year desert. Such districts do exist, and exist in vastness; the whole earth is not prepared for the habitation of man; only certain small portions are prepared for him,-the houses, as it were, of the human race, from
which they are to look abroad upon the rest of the world; not to wonder or complain that it is not all house, but to be grateful for the kindness of the admirable building, in the house itself, as compared with the rest. It would be as absurd to think it an evil that all the world is not fit for us to inhabit, as to think it an evil that the globe is no larger than it is. As much as we shall ever need is evidently assigned to us for our dwelling place; the rest, covered with rolling waves or drifting sands, fretted with ice or crested with fire, is set before us for contemplation in an uninhabitable magnificence. And that part which we are enabled to inhabit owes its fitness for human life chiefly to its mountain ranges, which throwing the super. fluous rain off as it falls, collect it in streams or lakes, and guide it into given places, and in given directions; so that men can build their cities in the midst of fields which they know will be always fertile, and establish the lines of their commerce upon streams which will not fail.

Nor is this giving of motion to water to be considered as confined only to the surface of the earth. A no less important function of the hills is in directing the flow of the fountains and springs from subterranean reservoirs. There is no miraculous springing up of water out of the ground at our feet; but every fountain and well is supplied from reservoir among the hills, so placed as to involve some slight fall or pressure enough to secure the constant flowing of the stream; and the incalculable blessing of the power given to us, in most valleys, of reaching by excavation some point whence the water will rise
to the surface of the ground in perennial flow, is entirely owing to the concave dispositions of the beds of clay or rock raised from beneath the bosom of the valley intc ranks of enclosing hills.

The second great use of mountains is to maintain a constant change in the currents and nature of the air. Such change would, of course, have been partly caused by difference in soils and vegetation, even if the earth had been level; but to a far less extent than it is now by the chains of hills which-exposing on one side their masses of rock to the full heat of the sun (increased by the angle at which the rays strike on the slope), and on the other casting a soft shadow for leagues over the plains at their feet-divide the earth not only into districts, but into climates; and cause perpetual currents of air to traverse their passes in a thousand different states; moistening it with the spray of their waterfalls, sucking it down and beating it hither and thither in the pools of their torrents, closing it within clefts and caves, where the sunbeams never reach, till it is as cold as November mists; then sending it forth again to breathe lightly across the slopes of velvet fields, or to be scorched among sunburnt shales and grassless crags; then drawing it back in moaning swirls through clefts of ice, and up into dewy wreaths above the snow-fields; then piercing it with strange electric darts and flashes of mountain fire, and tossing it high in fantastic storm-cloud, as the dried grass is tossed by the mower, only suffering it to depart at last,
when chastened and pure, to refresh the faded air of the far oft plains.

The third great use of mountains is to cause perpetual change in the soils of the earth. Without such provision the ground under cultivation would in a series of years become exhausted, and require to be upturned laboriously by the hand of man. But the elevations of the earth's surface provide for it a perpetual renovation. The higher mountains suffer their summits to be broken into fragments, and to be cast down in sheets of massy rock, full, as we shall see presently, of every substance necessary for the nourishment of plants; these fallen fragments are again broken by frost, and ground by torrents, into various conditions of sand and clay-materials which are distributed perpetually by the streams farther and farther from the mountain's base. Every shower that swells the rivulets enables their waters to carry certain portions of earth into new positions, and exposes new banks of ground to be mined in their turn. That turbid foaming of the angry water,-that tearing down of bank and rock along the flanks of its fury,-are no disturbances of the kind course of nature; they are beneficient operations of laws necessary to the existence of man, and to the beauty of the earth. The process is continued more gently, but not less effectively, over all the surface of the lower undulating country; and each filtering thread of summer rain which trickles through the short turf of the uplands is bearing its own appointed burden of earth to be thrown down on some new natural garden in the dingles beneath.

I have not spoken of the local and peculiar utilities of mountains. I do not count the benefit of the supply of summer streams from the moors of the higher ranges,of the various medicinal plants which are nested among their rocks,-of the delicate pasturage which they furnish for cattle, -of the forests in which they bear timber for shipping,-the stones they supply for building, or the ores of metal which they collect into spots open to discovery, and easy for working. All these benefits are of a secondary or a limited nature. But the three great functions which I have just described, -those of giving motion and change to water, air, and earth, are indispensable to human existence; they are operations to be regarded with as full a depth of gratitude as the laws which bid the tree bear fruit, or the seed multiply itself in the earth. And thus those desolate and threatening ranges of dark mountain, which in nearly all ages of the world men have looked upon with aversion, or with terror, and shrunk back from as if they were haunted by perpetual images of death, are in reality sources of life and happiness far fuller and more beneficient than all the bright fruitfulness of the plain. The valleys only feed; the mountains feed, and guard, and strengthen us. We take our idea ef fearlessness and sublimity alternately from the mountains and the sea; but we associate them unjustly. The sea-wave, with all its beneficence, is yet devouring and terrible; but the silent wave of the blue mountain is lifted towards heaven in a stillness of perpetual mercy; and the one surge, unfathomable in its darkness, the other
unshaken in its faithfulness, for ever bear the seal of their appointed symbolism:-
"Thy righteousness is like the great mountains;
"Thy judgments are a great deep."
33. Mountains are to the rest of the earth, what violent muscular action is to the body of man. The muscles and tendons of its anatomy are, in the mountain, brought out with force and convulsive energy, full of expression, passion, and strength; the plains and the lower hills are the repose and the effortless motion of the frame, when its muscles lie dormant and concealed beneath the lines of its beauty,-yet ruling those lines in their every undulation. This then is the first grand principle of the truth of the earth. The spirit of the hills is action, that of the lowlands repose; and between these there is to be found every variety of motion and of rest, from the inactive plain, sleeping like the firmament, with cities for stars, to the fiery peaks, which with heaving bosoms and exulting limbs, with the clouds drifting like hair from their bright foreheads, lift up their Titan heads to Heaven, saying, "I live for ever."
34. Where they are,* they seem to form the world; no mere bank of a river here, or of a lane there, peeping out among the hedges or forests, but from the lowest valley

[^33]to the highest clouds, all is theirs,-one adamantine dominion and rigid authority of rock. We yield ourselves to the impression of their eternal unconquerable stubvornness of strength; their mass seems the least yielding least to be softened, or in anywise dealt with by externa force, of all earthly substance. And behold, as we look further into it, it is all touched and troubled, like waves by a summer breeze; rippled far more delicately than seas or lakes are rippled; they only undulate along their surfaces-this rock trembles through its every fibre, like the chords of an Æolian harp, like the stillest air of spring, with the echoes of a child's voice. Into the heart of all those great mountains, through every tossing of their boundless crests, and deep beneath all their unfathomable defiles, flows that strange quivering of substance. Other and weaker things seem to express their subjection to an Infinite Power only by momentary terrors; as the weeds bow down before the feverish wind, and the sound of the going in the tops of the taller trees passes on before the clouds, and the fitful opening of pale spaces on the dark water, as if some invisible hand were casting dust abroad upon it, gives warning of the anger that is to come, we may well imagine that there is a fear passing upon the grass, and leaves, and waters, at the presence of some great spirit commissioned to let the tempest loose; but the terror passes, and their sweet rest is perpetually restored to the pastures and the waves. Not so to the mountains. They, which at first seem strengthened bepond the dread of any viclence or change, are yet also
ordained to bear upon them the symbol of a perpstual fear. The tremor which fades from the soft lake aud gliding river is sealed to all eternity upon the rock; and while things that pass visibly from birth to death may sometimes forget their feebleness, the mountains are made to possess a perpetual memorial of their infancy-that infancy which the prophet saw in his vision,*-"I beheld the earth, and lo, it was without form, and void, and the heavens, and they had no light. I beheld the mountains, and lo they trembled, and all the hills moved lightly."
35. The longer I stayed among the Alps, and the more closely I examined them, the more I was struck by the one broad fact of there being a vast Alpine plateau, or mass of elevated land, upon which nearly all the highest peaks stood like childreu set upon a table, removed, in most cases, far back from the edge of the plateau,-as if for fear of their falling; while the most majestic scenes in the Alps are produced, not so much by any violation of this law, as by one of the great peaks having apparently walked to the edge of the table to look over, and thus showing itself suddenly above the valley in its full height. This is the case with the Wetterhorn and Eiger at Grindelwald, and with the Grande Jorasse above the Col de Ferret. But the raised bank or table is always intelligibly in existence, even in these apparently exceptional

[^34]cases; and for the most part, the great peaks are not allowed to come to the edge of it, but remain like the keeps of castles far withdrawn, surrounded, league beyond league, by comparatively level fields of mountain, over which the lapping sheets of glacier writhe and flow, foaming about the feet of the dark central crests like the surf of an enormous sea-breaker hurled over a rounded rock, and islanding some fragment of it in the midst. And the result of this arrangement is a kind of division of the whole of Switzerland into an upper and lower mountain world,the lower world consisting of rich valleys, bordered by steep, but easily accessible, wooded banks of mountain, more or less divided by ravines, through which glimpses are caught of the higher Alps; the upper world, reached after the first banks of 3,000 or 4,000 feet in height have been surmounted, consisting of comparatively level, but most desolate tracts of moor and rock, half covered by glacier, and stretching to the feet of the true pinnacles of the chain. It can hardly be necessary to point out the perfect wisdom and kindness of this arrangement, as a provision for the safety of the inhabitants of the high mountain regions. If the great peaks rose at once from the deepest valleys, every stone which was struck from their pinnacles, and every snow-wreath which slipped from their ledges, would descend at once upon the inhabitable ground, over which no year would pass without recording some calamity of earth-slip or avalanche; while in the course of their fall both the stones and the snow would strip the woods from the hill-sides, leaving only
naked channels of destruction where there are now the sloping meadow and the chestnut glade. Besides this, the masses of snow, cast down at once into the warmer air, would all melt rapidly in the spring, causing furious inundation of every great river for a month or six weeks. The snow being then all thawed, except what lay upon the highest pealss in regions of nearly perpetual frost, the rivers would be supplied during the summer only by fountains, and the feeble tricklings on sunny days from the high snows. The Rhone, under such circumstances, would hardly be larger, in summer, than the Severn, and many Swiss valleys would be left almost without moisture. All these calamities are prevented by the peculiar Alpine structure which has been described. The broken rocks and the sliding snow of the high peaks, instead of being dashed at once to the vales, are caught upon the desolate shelves, or shoulders, which everywhere surround the central crests. The soft banks which terminate these shelves, traversed by no falling fragments, clothe themselves with richest wood, while the masses of snow heaped upon the ledge above them, in a climate neither so warm as to thaw them quickly in the spring, nor so cold as to protect them from all the power of the summer sun, either form themselves into glaciers, or remain in slowly wasting fields even to the close of the year,-in either case supplying constant, abundant, and regular streams to the villages and pastures beneath, and to the rest of Europe, nuble and navigable rivers.

Now, that such a structure is the best anil wisest pos. sible,* is indeed sufficient reason for its existence, and to many people it may seem useless to question farther respeoting its origin. But I can hardly conceive any one standing face to face with one of these towers of central rock, and yet not also asking himself, Is this indeed the actual first work of the Divine Master, on which I gaze? Was the great precipice shaped by His finger, as Adam was shaped out of the dust? Were its clefts and ledges carved upon it by its Creator, as the letters were on the tables of the law, and was it thus left to brar its eternal testimony to His beneficence among these clouds of Heaven? Or is it the descendant of a long race of mountains, existing under appointed laws of birth and endurance, death and decrepitude? There can be no doubt as to the answer. The rock itself answers audibly by the murmur of some falling stone or rending pinnacle. It is not as it was once. Those waste leagues around its feet are loaded with the wrecks of what it was. On these, perhaps, of all mountains, the characters of decay are written most clearly; around these are spread most gloomily the memorials of their pride, and the signs of their humiliation.

What then were they once? The only answer is yet again-"Behold the cloud!"
36. There are many spots among the inferior ridges of the Alps, such as the Col de Ferret, the Col d'Anterne,

[^35]and the associated ranges of the Buet, which, though commanding prospects of great nobleness, are themselves very nearly types of all that is most painful to the human mind. Vast wastes of mountain ground,* covered here and there with dull grey grass or moss, but breaking continually into black banks of shattered slate, all glistening and sodden with slow tricklings of clogged, incapable streams; the snow-water oozing through them in a cold sweat, and spreading itself in creeping stains among their dust; ever and anon a shaking here and there, and a handful or two of their particles or flakes trembling down, one sees not why, into more total dissolution, leaving a few jagged teeth, like the edges of knives eaten away by vinegar, projecting, through the half dislodged mass, from the inner rock; keen enough to cut the hand or foot that rests on them, yet crumbling as they wound, and soon sinking again into the smooth, slippery, glutinous heap; looking like a beach of black scales of dead fish cast ashore from a poisonous sea, and sloping away into foul ravines, branched down immeasurable slopes of barrenness, where the winds howl and wander continually, and the snow lies in wasted and sorrowful fields covered with sooty dust, that collects in streaks and stains at the bottom of all its thawing ripples.

[^36]I know of no other scenes so appalling as these in storm: or so woful in sunshine. Where, however, these same rocks exist in more favourable positions-that is to say, in gentler banks and at lower elevations-they form a ground for the most luxuriant vegetation; and the valleys of Savoy owe to them some of their loveliest solitudesexquisitely rich pastures, interspersed with arable and orchard land, and shaded by groves of walnut and cherry. Scenos of this kind, and of that just described, so singularly opposed, and apparently brought together as foils to each other, are, however, peculiar to certain beds of the slaty coherents, which are both vast in elevation, and easy of destruction. In Wales and Scotland the same groups of rocks possess far greater hardness, while they attain less elevation; and the result is a totally different aspect of scenery. The severity of the climate and the comparative durableness of the rock, forbid the rich vegetation; but the exposed summits, though barren, are not subject to the laws of destruction so rapid and fearful as in Switzerland, and the natural colour of the rock is oftener developed in the purples and greys which, mingled with the heather, form the principal elements of the deep and beautiful distant blue of the British hills. Their genther mountain streams also permit the beds of rock to remain in firm, though fantastic, forms along their banks, and the gradual action of the cascades and eddies upon the slaty cleavage produces many pieces of foreground scenery to which higher hills can present no parallel.
37. Unlike Chamouni Aiguilles, there is no aspect of destruction about the Matterhorn cliffs. They are torn remnants of separating spires, yielding flake by flake, and band by band, to the continual process of decay. They are, on the contrary, an unaltered monument, seemingly sculpiured long ago, the huge walls retaining yet the forms into which they were first engraven, and standing like an Egyptian Temple;-delicate fronted, softly coloured, the suns of uncounted ages rising and falling upon it continu ally, but still casting the same line of shadows from east to west; still, century after century, touching the same purple stains on the lotus pillars; while the desert sand ebbs and flows about their feet, as those autumn leaves of rock lie heaped and weak about the base of the Cervin.

Is not this a strange type in the very heart and height of these mysterious Alps-these wrinkled hills in their snowy, cold, grey-haired old age, at first so silent, then, as we keep quiet at their feet, muttering and whispering to us garrulously in broken and dreaming fits, as it were, about thoir childhood,--is it not a strange type of the things which "Out of weakness are made strong?" If one of these little flakes of mica sand, hurried in tremulous spangling along the bottom of the ancient river, toc light to sink, too faint to float, almost too small for sight, could have had a mind given to it as it was at last borne down with its kindred dust into the abysses of the stream, and laid, (might it not have been thought?) for a hopeless eternity, in the dark ooze, the most despised, forgotten, and feeble of all earth's atoms; incapable of any use
or change; not fit, down there in the diluvial darkness, so much as to help an earth wasp to build its nest, or feed the first fibre of a lichen;-what would it have thought, had it been told that one day, knitted into a strength as of imperishable iron, rustless by the air, infusible by the flame, out of the substance of it, with its fellows, the axo of God should hew that Alpine tower?-that against itpoor, helpless mica flake!-the wild north winds should rage in vain; beneath it-low-fallen mica flake!-the snowy hills should lie bowed like flocks of sheep, and the kingdoms of the earth fade away in unregarded blue; and around $i t$-weak, wave-drifted mica flake !-the great war of the firmament should burst in thunder, and yet stir it not; and the fiery arrows and angry meteors of the night fall blunted back from it into the air; and all the stars in the clear heaven should light, one by one as they rose, new cressets upon the points of snow that fringed its abiding-place on the imperishable spire?

## SECTION VI.

ILLUSTRATIVE: STONES.
38. There are no natural objects out of which more san be learned than out of stones. They seem to have been created especially to reward a patient observer. Nearly all other objects in nature can be seen to some extent without patience, and are pleasant even in being half seen. Trees, clouds, and rivers, are enjoyable even by the careless; but the stone under his foot has, for carelessness, nothing in it but stumbling; no pleasure is languidly to be had out of it, nor food, nor good of any kind; nothing out symbolism of the hard heart, and the unfatherly gift. And yet, do but give it some reverence and watchfulness, and there is bread of thought in it, more than in any other lowly feature of all the landscape. For a stone, when it is examined, will be found a mountain in miniature. The fineness of Nature's work is so great that into a single block, a foot or two in diameter, she can compress as many changes of form and structure, on a small scale, as she needs for her mountains on a large one; and taking moss for forests, and grains of crystal for crags, the surface of a stone in by far the plurality of instances is more interesting than the surface of an ordinary hill; more fantastic in form, and incomparably richer in colour
39. On a Highland hill-side are multitudinous clusters of fern and heather; on an Alpine one, multitudinous groves of chestnut and pine. The number of the things may be the same, but the sense of infinity is in the latter case far greater, because the number is of nobler things. Indeed, so far as mere magnitude of space occupied on the field of the horizon is the measure of objects, a bank of earth ten feet high may, if we stoop to the foot of it, be made to occupy just as much of the sky as that bank of mountain at Villeneuve; nay, in many respects, its little ravines and escarpments, watched with some help of imagination, may become very sufficiently representative to us of those of the great mountain; and in classing all water-worn mountain ground under the general and humble term of Banks, I mean to imply this relationship of structure between the smallest eminences and the highest But in this matter of superimposed quantity, the distinctions of rank are at once fixed. The heap of earth bears its few tufts of moss, or knots of grass; the Highland or Cumberland , mountain, its honeyed heathers or scented ferns; but the mass of the bank at Martigny or Villeneuve has a vineyard in every cranny of its rocks, and a chestnut grove on every crest of them. . . . The minute mounds and furrows scattered up the side of that great promontory when they are actually approached, after three or four hours climbing, turn into independent hills, with true parks of lovely pasture land enclosed among them and avenue after avenue of chestnuts, walnuts, and pines, bending round their bases, while in the deeper din
gles, populous villages, literally bound down to the rock by the enormous trunks of vine, which, first trained lightly over the loose stone roofs, have in process of years cast their fruitful net over the whole village, and fastened it to the ground under their purple weight and wayward coils as securely as ever human heart was fastened to earth by the net of the Flatterer.
40. When a rock of any kind has lain for some time exposed to the weather, Nature finishes it in her own way. First she takes wonderful pains about its forms, sculpturing it into exquisite variety of dent and dimple, and rounding or hollowing it into contours, which for fineness no human hand can follow; then she colours it; and every one of her touches of colour, instead of being a powder mixed with oil, is a minute forest of living trees, glorious in strength and beauty and concealing wonders of structure.
41. On the broken rocks of the foreground in the crystalline groups, the mosses seem to set themselves consentfully and deliberately to the task of producing the most exquisite harmonies of colour in their power. They will not conceal the form of the rock, but will gather over it in little brown bosses, like small cushions of velvet, made of mixed threads of dark ruby silk and gold, rounded over more subdued films of white and grey, with lightly crisped and curled edges like hoar frost on fallen leaves, and minute clusters of upright orange stalks with pointed caps, and fibres of deep green, and gold, and faint purplo
rassing into black, all woven together, and following with unimaginable fineness of gentle growth the undulation of the stone they cherish, until it is charged with colour so that it can receive no more; and instead of looking rug. ged or cold, or stern, as anything that a rock is held ta be at heart, it seems to be clothed with a soft dark leopard's skin embroidered with arabesque of purple and silver.
42. The colour of the white varieties of rarble is of exquisite delicacy, owing to the partial translucency of the pure rock; and it has always appeared to me a most won derful ordinance-one of the most marked pieces of purpose in the creation-that all the variegated kinds should be comparatively opaque, so as to set off the colour on the surface, while the white which, if it had been opaque, would have looked somewhat coarse, (as for instance common chalk does), is rendered just translucent enough to give an impression of extreme purity, but not so translucent as to interfere in the least with the distinctness of any forms into which it is wrought. The colours of variegated marbles are also for the most part very beautiful, especially those composed of purple, amber, and green, with white; and there seems something notably attractive to the human mind in the vague and veined labyrinths of their arrangements
43. I have often had occasion to allude to the apparent connection of brilliancy of colour with vigour of life or purity of substance. This is pre-eminently the case in
the mineral kingdom. The perfection with which the par ticles of any substance unite in crystallization, corresponds in that kingdom to the vital power in organic nature; and it is a universal law, that according to the purity of any substance, and according to the energy of its crystallization, is its beauty or brightness. Pure earths are white when in powder; and the same carths, which are the constituents of clay and sand, form, when crystallized, the emerald, ruby, sapphire, amethyst, and opal.
44. As we pass between the hills which has been shaken by earthquake and torn by convulsion, we find that periods of perfect repose succeed those of destruction. The pools of calm water lie clear beneath their fallen rocks, the water-lilies gleam, and the reeds whisper among their shadows; the village rises again over the forgotten graves, and its church tower, white through the stormlight, proclaims a renewed appeal to His protection in whose hand "are all the corners of the earth, and the strength of the hills is His also." There is no loveliness of Alpine valley that does not teach the same lesson. It is just where the "mountain falling cometh to nought, and the rock is removed out of his place," that in process of years the fairest meadows bloom between the fragments, the clearest rivulets murmur from between their crevices among the flowers, and the clustered cottages, each shel. tered beneath some strength of mossy stone, now to be removed no more, and with their pastured flocks around them, safe from the eagle's stoop and the wolf's ravine:
have written upon their fronts, in simple words, the mountaineer's faith in the ancient promise,-" Neither shalt thou be afraid of destruction, when it cometh; for thou shalt be in league with the stones of the field, and the beasts of the field shall be at peace with thee."

## SECTION VII.

## ILIUSTRATIVE: PLANTS AND FLOWERS.

45. Wonderful, in universal adaptation to man's need, desire, and disciplinc; God's daily preparation of the earth for him, with beautiful means of life. First, a carpet, tc make it soft for him; then a coloured fantasy of embroidery thereon; then, tall spreading of foliage to shade him from sun-heat, and shade also the fallen rain, that it may not dry quickly back into the clouds, but stay to nourish the springs among the moss. Stout wood to bear this leafage; easily to be cut, yet tough and light, to make houses for him, or instruments, (lance-shaft, or plough handle, according to nis temper); useless it had been if harder; useless if less fibrous; useless if less elastic. Winter comes, and the shade of leafage falls away, to let the sun warm the earth; the strong boughs remain, breaking the strength of winter winds. The seeds which are to prolong the race, innumerable according to the need, are made beautiful and palatable, varied into infinitude of appeal to the fancy of man, or provision for his service; cold juice, or flowing spice, or balm, or incense, softening oil, preserving resin, medicine of styptic, febrifuge, or lulling charm; and al. these presented in forms of endless change. Fragility or force, softness and strength, in all degrees and aspects; unerring uprightness, as of temple pillars, or unguided wan
dering of feeble tendrils on the ground; mighty resistances of rigid arm and limb to the storms of ages, or wavings to and fro with faintest pulse of summer streamlet; roots cleaving the strength of rock, or binding the transience of the sand; crests basking in sunshine of the desert, or hiding by dripping spring and lightless cave; foliage far tossing in entangled fields beneath every wave of oceanclothing with variegated, everlasting films the peaks of the trackless mountains, or.ministering, at cottage doors, to every gentlest passion and simplest joy of humanity.
46. If ever in autumn a pensiveness falls upon us, as the leaves drift by in their fading, may we not wisely look up in hope to their mighty monuments? Behold how fair, how far prolonged in arch and aisle, the avenues of the valleys, the fringes of the hills! so stately,-so eternal; the joy of man, the comfort of all living creatures, the glory of the earth,-they are but the monuments of those poor leaves that flit faintly past us to dic. Let them not pass, without our understanding their last counsel and example; that we also, careless of monument by the grave, may build it in the world-monument by which men may be taught to remember, not where we died, but where we lived.
47. The Pine-magnificent! nay, sometimes almost terrible. Other trees, tufting crag or hill, yield to the form and sway of the ground, clothe it with soft compliance, are partly its subjects, partly its flatterers, partly its comforters. But the pine rises in serene resistance, self-con
tained nor can I ever without awe stay long under a great Alpine cliff, far from all house or work of men, looking up to its companies of pines, as they stand on the inac cessible juts and perilous ledges of the enormous wall, in quiet multitudes, each like the shadow of the one beside it-upright, fixed, spectral, as troops of ghosts standing on the walls of Hades, not knowing each other, dumb for ever. You cannot reach them, cannot cry to them: those trees never heard human voice: they are far above all sound but of the winds. No foot ever stirred fallen leaf of theirs: all comfortless they stand, between the two eternities of the Vacancy and the Rock; yet with such iron will, that the rock itself looks bont and shattered beside them,-fragile, weak, inconsistent, compared to their dark energy of delicate life, and monotony of enchanted pride -unnumbered, unconquerable.

Then note farther their perfectness. The impression on most people's minds must have been received more from pictures than reality, so far as I can judge, so ragged they think the pine; whereas its chief character in health is green and full rourdness. It stands compact, like one of its own cones, slightly curved on its sides, finished and quaint as a carved tree in some Elizabethan garden; and instead of being wild in expression, forms the softest of all forest scenery, for other trees show their trunks and twisting boughs ; but the pine, growing either in luxu riant mass, or in happy isolation, allows no branch to be seen. Summit behind summit rise its pyramidal ranges or down to the very grass sweep the circlets of its boughs
-so that there is nothing but green cone, and green carpet. Nor is it only softer, but in one sense more cheerful than other foliage, for it casts only a pyramidal shadow. Lowland forest arches overhead, and chequers the ground with darkness; but the pine, growing in scattered groups, leaves the glades between emerald bright. Its gloom is all its own; narrowing into the sky, it lets the sunshine strike dowu to the dew. And if ever a superstitious feeling comes over me among the pine glades, it is never tainted with the old German forest fear, but it is only a more solemn tone of the fairy enchantment that haunts our English meadows; so that I have always called the prettiest pine-glade in Chamouni, "Fairies' Hollow." It is in the glen beneath the steep ascent above Pont Pelissier, and may be reached by a little winding path which goes down from the top of the hill*-being indeed not truly a glen, but a broad ledge of moss and turf, leaning in a formidable precipice (which, however, the gentle branches hide) over the Arve. An almost isolated rock promontory, many coloured, rises at the end of it. On the other sides it is bordered by cliffs, from which a little cascade falls, literally, down among the pines, for it is so light, shaking itself into mere showers of seed pearl in the sun, that the pines don't know it from mist, and grow through it without minding. Underneath, there is only the mossy

[^37]silence, and above, for ever, the snow of the nameless Aiguille.

Other trees rise against the sky in dots and krots, but this, in fringes. You never see the edges of it, so subtle are they; and for this reason,-it alone of trees, so far as I know, is capable of the fiery change, which has been noticed by Shakspeare. When the sun rises behind a ridge crested with pine, provided the ridge be at a distance of about two miles, and seen clear, all the trees, for about three or four degrees on each side of the sun, become trees of light, seen in clear flame against the darker sky, and dazzling as the sun itself. I thought at first this was owing to the actual lustre of the leaves; but I believe now it is caused by the cloud-dew upon themevery minutest leaf carrying its diamond. It seems as if these trees, living always among the clouds, had caught part of their glory from them; and themselves, the darkest of vegetation, could yet add splendour to the sun itself.
48. The Swiss. have certainly no feelings respecting thein mountains in anywise correspondent with ours. It was rather as fortresses of defence, than as spectacles of splendour, that the cliffs of the Rothslock bare rule over the destinies of those who dwelt at their feet; and the training for which the mountain children had to thank the slopes of the Muotta-Thal, was in soundness of breath, and steadiness of limb, far more than in elevation of idea. But the point which I desire the reader to note is, that the character of the scene which, if any, appears to have been impressive to the inhabitant, is not that which we
ourselves feel when we enter the district. It was not from their lakcs, nor their cliffs, nor their glaciersthough these were all peculiarly their possession-that the three venerable cantons received their name. They were not called the States of the Rock, nor the States of the Lake, but the States of the Forest. And the one of the three which contains the most touching record of the spiritual power of Swiss religion, in the name of the convent of the "Hill of Angels," has, for its own, none but the sweet cliildish name of "Under the Woods."

And indeed you may pass under them if, leaving the most sacred spot in Swiss history, the Meadow of the Three Fountains, you bid the boatman row southward a little way by the shore of the Bay of Uri. Steepest there on its western side, the walls of its rocks ascend to heaven. Far in the blue of evening, like a great cathedral pavement, lies the lake in its darkness; and you may hear the whisper of innumerable falling waters return from the hollows of the cliff, like the voices of a multitude praying under their breath. From time to time the beat of a wave, slow lifted where the rocks lean over the black depth, dies heavily as the last note of a requiem. Opposite, green with steep grass, and set with châlct villages, the Fron-Alp rises in one solemn glow of pastoral light and peace; and above, against the clouds of twilight, ghostly in the gray precipice, stand, myriad by myriad, the shadowy armies of the Unterwalden pine.
49. It had been wild weather when I left Rome, and all across the Campagna the clouds were sweeping in sul.
phurous blue, with a clap of thunder.or two, and lreak ing gleams of sun along the Claudian aqueduct, lighting up the infirity of its arches, like the bridge of Chaos But as I climbed the long slope of the Alban Mount the storm swept finally to the north, and the noble outline of the domes of Albano, and graceful darkness of its ilex grove, rose against pure streaks of alternate blue and amber, the upper sky gradually flushing through the last fragments of rain-cloud in deep palpitating azure, half æther and half dew. The noonday sun came slanting down the rocky slopes of La Riccia, and their masses of entangled and tall foliage, whose autumnal tints were mixed with the wet verdure of a thousand evergreens, were penetrated with it, as with rain. I cannot call it colour,-it was conflagration. Purple, and crimson, and scarlet, like the curtains of God's Tabernacle, the rejoicing trees sank into the valley in showers of light, every separate leaf quivering with buoyant and burning life; each, as it turned to reflect, or to transmit the sunbeam, first a torch and then an emerald. Far up into the recesses of the valley the green vistas arched like the hollows of mighty waves of some crystalline sea, with the arbutus flowers dashed along their banks for foam, and silver flakes of orange spray tossed into the air round them, breaking over the grey walls of rock into a thousand separate stars, fading and kindling alternately as the weak wind lifted and let them fall. Every glade of grass burned like the golden floor of heaven, opening in sudden gleams as the foliage broke, and closed above it, as shert-light
ning opens in a cloud at sunset; the motionless masses of dark rock, dark though flushed with scarlet lichen, casting their quiet shadows across its restless radiance, the fountain underneath them filling its marble hollow with blue mist and fitful sound-and, over all, the multitudinous bars of amber and rose-the sacred clouds that have no darkness, and only exist to illumine, were seen in fathomless intervals between the solemn and orbed repose of the stone pines, passing to lose themselves in the last, white, blinding lustre of the measureless line where the Campagna melted into the blaze of the sea.
50. Flowers seem intended for the solace of ordinary humanity: children love them; quiet, contented, ordinary people love them as they grow; luxurious and disorderly people rejoice in them gathered; they are the cottager's treasure; and in the crowded town, mark, as with a little broken fragment of rainbow, the windows of the workers in whose hearts rests the covenant of peace.
51. Yet few people really care about flowers. Many, indeed, are fond of finding a new shape of blossom, caring for it as a child cares about a kaleidoscope. Many, also, like a fair service of flowers in the greenhouse, as a fair service of plate on the table. Many are scientifically interested in them, though even these in the nomenclature, rather than the flowers; and a few enjoy their gardens. But, the blossoming time of the year being principally spring, I perceive it to be the mind of most people, during that period, to stay in towns. A year or
two ago a keen-sighted and eccentrically-minded friend of mine, having taken it into his head to violate this national custom, and go to the Tyrol in spring, was passing through as valley near Landech with several similarly head-strong companions. A strange mountain appeared in the distance, belted about its breast with a zone of blue, like our English Queen. Was it a blue cloud, a blue horizontal bar of the air that Titian breathed in youth, seen now far away, which mortal might never breathe again? Was it a mirage-a meteor? Would it stay to be approached ?(ten miles of winding road yet between them and the foot of this mountain)-such questioning had they concerning it. My keen-sighted friend, alone, maintained it to be substantial;-whatever it might be it was not air, and would not vanish. The ten miles of road were overpassed, the carriage left, the mountain climbed. It stayed patiently, expanding still into richer breath and heavenlier glow-a belt of gentians. Such things may verily be seen among the Alps in spring, and in spring only, which being so, I observe most people prefer going in autumn.
52. Perhaps few people have ever asked themselves why they admire a rose so much more than all other flowers. If they consider, they will find, first, that red is, in a delicately gradated state, the loveliest of all pure colours; and secondly, that in the rose there is no shadow, except what is composed of colour. All its shadows are fuller in colour than in lights, owing to the translucency and reflective power of the leaves.
53. Has the reader ever considered the relations of commorest forms of volatile substance? The invisible particles which cause the scent of a rose-leaf, how minute, how multitudinous, passing richly away into the air continually!
54. In the range of inorganic nature I doubt if any object can be found more perfectly beautiful, than a fresh, deep snow-drift, seen under warm light. Its curves are of inconceivable perfection and changefulness; its surface and transparency alike exquisite; its light and shade of inexhaustible variety and inimitable finish,-the shadows sharp, pale, and of heavenly colour, the reflected lights intense and multitudinous, and mingled with the sweet occurrences of transmitted light. . . . If, passing to the edge of a sheet of it upon the rower Alps, early in May, we find, as we are nearly sure to find, two or three little round openings pierced in it; and through these, emergent, a slender, pensive, fragile flower,* whose small, dark, purple-fringed bell hangs down and shudders over the icy cleft that it has cloven, as if partly wondering at its own recent grave, and partly dying of very fatigue after its hard-won victory; we shall be, or we ought to be, moved by a totally different impression of loveliness

[^38]from that which we receive among the dead ice and the idle clouds: there is now uttered to us a call for sympathy, now offered to us an image of moral purpose and achievement, which, however unconscious or senseless the creature may indeed be that so seems to call, cannot be heard without affection, nor contemplated without worship, by any of us whose heart is rightly turned or whose mind is clearly and surely sighted.
55. It has been wèll shown by Dr. Herbert, that many plants are found alone on a certain soil or sub-soil in a wild state, not because such soil is favourable to them, but because they alone are capable of existing on it, and because all dangerous rivals are by its inhospitality removed. Now, if we withdraw the plant from this position, which it hardly endures, and supply it with the earth, and maintain about it the temperature that it delights in; withdrawing from it, at the same time, all rivals, which in such conditions nature would have thrust upon it, we shall indeed obtain a magnificently developed example of the plant, colossal in size, and splendid in organization; but we shall utterly lose in it that moral ideal which is dependent on its right fulfilment of its appointed functions. It was intended and created by the Deity for the covering of those lonely spots where no other plant could live. It has been thereto endowed with courage and strength, and capabilities of endurance; its character and glory are not therefore in the gluttonous and idle feeding of its own over-luxuriance, at the expense of other creatures utterly destroyed and rooted out for its
good alone ; but in its right doing of its hard duty, and forward climbing into those spots of forlorn hope where it alone can bear witness to the kindness and presence of the spirit that cutteth out rivers among the rocks, as He covers the valleys with corn; and there, in its vanward place, and only there, where nothing is withdrawn for it, nor hurt by it, and where nothing can take pan of its honour, nor usurp its throne, are its strength and fairness, and price, and goodness in the sight of God to be truly esteemed. The first time I saw the Soldanella Alpina, before spoken of, it was growing of magnificent size on a sunny Alpine pasture, among bleating of sheep, and lowing of cattle, associated with a profusion of Geum Montanum, and Ranunculus Pyranæus. I noticed it only because new to me-nor perceived any peculiar beauty in its cloven flower. Some days after, I found it alone, among the rack of the higher clouds, and howling of glacier winds; and, as I described it, piercing through an edge of avalanche which in its retiring had left the new ground brown and lifeless, and as if burnt by recent fire. The plant was poor and feeble, and seemingly exhausted with its efforts,-but it was then that I comprehended its ideal character, and saw its noble function and order of glory among the constellations of the earth.
56. Grasses.-Minute, granular, feathery, or downy seed vessels, mingling quaint brown punctuation, and dusty tremors of dancing grain, with the bloom of the nearer fields and casting softness of plumy mist along
their surfaces far away; mysterious evermore, not only with dew in the morning, or mirage at noon, but with the shaking threads of fine aborescence, each a little bel fry of grainbells, all a-chime.
57. Gather single blade of grass, and examine for a minute quietly its narrow sword-shaped strip of fluted green. Nothing, as it seems, there of notable goodness or beauty. A very little strength and a very little tallness, and a few delicate long lines meeting in a point,not a perfect point neither, but blunt and unfinished, by no means a creditable or apparently much-cared-for example of Nature's workmanship, made, only to be trodden on to-day, and to-morrow to be cast into the oven, 一 and a little pale and hollow stalk, feeble and flaccid, leading down to the dull brown fibres of roots. And yet, think of it well, and judge whether of all the gorgeous flowers that beam in summer air, and of all strong and goodly trees, pleasant to the eyes, or good for food,-stately palm and pine, strong ash and oak, scented citron, burdened vine--there be any man so deeply loved, by God so highly graced, as that narrow point of feeble green. And well does it fulfil its mission. Consider what we owe merely to the meadow grass, to the covering of the dark ground by that glorious enamel, by ihe companies of those soft, and countless, and peaceful spears. The fields! Follow forth but for a little time the thoughts of all that we ought to recognize in these words. All sprinur and summer is in them-the walks by silent
scented paths,-the rests in noonday heat,--the joy of herds and flocks,-the power of all shepherd life and meditation,-the life of sun-light upon the world falling in emerald streaks, and falling in soft blue shadows where else it would have struck upon the dark mould, or scorching dust. Pastures beside the pacing brooks, soft banks and knowls of lowly hills, thymy slopes of down, overlooked by the blue line of lifted sea, crisp lawns, all dim with early dew, or smooth in evening warmth of barred sunshine, dinted by happy feet, and softening in their fall the sound of loving voices-all these are summed in those simple words; and these are not all. We may not measure to the full the depth of this heavenly gift in our own land, though still as we think of it longer, the infinite of that meadow sweetness, Shakspeare's peculiar joy, would open on us more and more; yet we have it but in part. Go out in the spring time among the meadows that slope from the shores of the Swiss lakes to the roots of their lower mountains. There, mingled with the taller Gentians, and the white Narcissus, the grass grows deep and free; and as you follow the winding mountain paths, beneath arching boughs, all veiled with blossom-paths that forever droop and rise over the green banks and mounds sweeping down in scented undulation steep to the blue water, studded here and there with new-mown heaps filling all the air with fainter sweetness,-look up towards the higher hills, where the waves of everlasting green roll silently into their long inlets among the shadows of the pines; and we may perhaps at last know the meaning of
those quiet words of the 147th Psalm, "He maketh grass to grow upon the mountains."

Assembling the images we have traced, and adding the simplist of all, from Isaiah XL: 6, we find the grass and flowers are types, in their passing, of the passing of human life, and in their excellence, of the excellence of human life; and this in twofold way; first by their beneficence, and then by their endurance-the grass of the earth in giving the seed of corn, and in its beauty under tread of foot and stroke of scythe; and the grass of the waters, in giving its freshness for our rest, and in its bending before the wave. But, understood in the broad human and Divine sense, the "herb yielding seed"-(as opposed to the fruit tree yielding fruit) includes a third family of plants, and fulfils a third office to the human race. It includes the great family of the lints and flaxes, and fulfils thus the three offices of giving food, raiment, and rest. Follow out this fulfilment; consider the association of the linen garment and the linen embroidery with the priestly office and the furniture of the tabernacle, and consider how the rush has been to all time the first natural carpet thrown under the human foot. Then next observe the three virtues definitely set forth by the three families of plantsnot arbitrarily or fancifully associated with them, but in all the three cases marked for us by Scriptural words: 1st, Cheerfulness or joyful serenity; in the grass for food and beauty-"Consider the lilies of the field. how they grow; they toil not, neither do they spin." 2nd. Humility; in the grass for rest-"A bruised reed shall he not break.'

3rd. Love; in the grass for clothing; (because of its swift kindling,)-"The smoking flax shall he not quench." And then finally observe the confirmation of these last two images in, I suppose, the most important prophecy, relating to the future state of the Christian Church, which occurs in the Old Testament, namely that contained in the closing chapters of Ezekiel. The measures of the Temple of God are to be taken; and because it is only by charity and humility that those measures ever can be taken, the angel has,"a line of flax in his hand, and a measuring reed." The use of the line was to measure the land, and of the reed to take the dimensions of the buildings; so the buildings of the church, or its labours, are to be measured by humility; and its territory or land, by love.
58. Leaves motionless. The strong pines wave above them, and the weak grasses tremble beside them; but the blue stars rest upon the earth with a peace as of heaven; and far along the ridges of iron rock, moveless as they, the rubied crests of Alpine rose flash in the low rays of morning.
59. Mosses.-Meek creatures! the first mercy of the earth, veiling with hushed softness its dintless rocks; creatures full of pity, covering with strange and tender honour the scarred disgrace of ruin, laying quiet finger on the trembling stones to teach them rest. No words, that I know of, will say what these mosses are. None are deliate enough, none perfect enough, none rich enough. How is one to tell of the rounded bosses of furred and beaming
green, the starred divisions of rubied bloom, fine-filmed, as if the rock spirit could spin porphyry as we do glass,-the traceries of intricate silver, and fringes of amber, lustrous, arborescent, burnished through every fibre into fitful brightness and glossy traverses of silken change, yet all subdued and pensive, and framed for simplest, sweetest offices of grace? They will not be gathered like the flowers, for chaplet, or love-token; but of these the wild bird will make its nest, and the wearied child his pillow.

And as the earth's first mercy, so they are its last gift to us: when all other service is vain, from plant and tree, the soft mosses and grey lichen take up their watch by the head-stone. The woods, the blossoms, the gift-bcar ing grasses, have done their parts for a time; but these do service for ever. Trees for the builder's yard, flowers for the bride's chamber, corn for the granary, moss for the grave.
60. Lichens.-As is one sense the humblest, in another they are the most honoured of the earth-children. Unfading as motionless, the worm frets them not, and the autumn wastes not. Strong in loveliness, they neither blanch in heat, nor pine in frost. To them, slow-fingered, constant-hearted, is entrusted the weaving of the dark, eternal tapestries of the hills; to them, slow-pencilled, iris-dyed, the tender framing of their endless imagery Sharing the stillness of the unimpassioned rock, they share also its endurance: and while the winds of departing spring scatter the white hawthorn blossom like drifted
snow, and summer dims on the parched meadow the drooping of its cowslip gold,-far above, among the mountains, the silver lichen spots rest, star-like, on the stone and the gathering orange stain, upon the edge of yondev western peak, reflects the sunsets of a thousand years.

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## SECTION VIII.

## EDUCATION.

61. The most helpless and sacred work which can at present be done for humanity, is to teach people (chiefly oy example, as all best teaching must be done) not how 'to better themselves, but how to "satisfy themselves." It is the curse of every evil nature and creature to eat and not ne satisfied. The words of blessing are, that they shall eat and be satisfied; and as there is only one kind of water which quenches all thirst, so there is only one kind of bread which satisfies all hunger-the bread of justice or righteousness; which, hungering after, men shall always be filled, that being the bread of Heaven; but hungering after the bread of wages of unrighteousness, shall not be filled, that being the bread of Sodom. And in order to teach men how to be satisfied, it is necessary fully to understand the art of joy and humble life-this, at present, of all arts or sciences, being the one most needing study. Humble life, that is to say, proposing to itself no future exaltation, but only a sweet continuanoe; not excluding the idea of foresight, but wholly of fore-sorrow, and taking no troublous thought for coming days; so also not ex cluding the idea of providence or provision, but wholly of accumulation;-the life of domestic affection and domestic peace, full of sensitiveness to all elements of cost
less and kind pleasure;-therefore, chiefly to the loveliness of the natural world.
62. We shall find that the love of nature, wherever it has existed, has been a faithful and sacred element of human feeling; that is to say, supposing all the circumstances otherwise the same with respect to two individuals, the one who loves nature most will be always found to have more capacity for faith in God than the other. Na-ture-worship will be found to bring with it such a sense of the presence and power of a Great Spirit as no mere reasoning can either induce or controvert; and where that nature worship is innocently pursued-i.e., with due respect to other claims on time, feeling, and exertion, and associated with the higher principles of religion,-it becomes the channel of certain sacred truths, which by no other means can be conveyed.
63. Instead of supposing the love of nature necessarily connected with the faithfulness of the age, I believe it is connected properly with the benevolence and liberty* of the age; that is precisely the most healthy elemeut which distinctively belongs to us; and that out of it, cultivated no longer in levity or ignorance but in earnestness and as a duty, results will spring of an importance at present in-

[^39]conceivable; and lights arise, which, for the first time in man's history, will reveal to him the true nature of his life, the true field for his energies, and the true relations between him and his Maker.
64. To any person who has all his senses about him, a quiet walk, over not more than ten or twelve miles of road a day, is the most amusing of all travelling; and all travelling becomes dull in exact proportion to its rapidity.

Going by railroad I do not consider as travelling at all; it is merely "being sent" to a place, and very little different from becoming a parcel.
65. I believe an immense gain in the bodily health and happiness of the upper classes would follow on their steadily endeavouring, however clumsily, to make the physical exertion they now necessarily exert in amusements, definitely serviceable. It would be far better, for instance, that a gentleman should mow his own fields, than ride over other people's.
66. In order to define what is fairest, you must delight in what is fair; and I know not how few or how many there may be who take such delight. Once I could speak joyfully about beautiful things, thinking to be understood; now I cannot, any more, for it seems to me that no one regards them. Wherever I look or travel, in England or abroad, I see that men, wherever they can reach, destroy all beauty. They seem to have no other desire or hope but to have large houses, and to be able to move fast. Every
perfect and lovely spot which they can touch, they defile Thus the railroad bridge over the fall of Schaffhausen, and that round the Clarens shore of the Lake of Geneva, have destroyed the power of two pieces of scenery of which nothing can ever supply the place, in appeal to the higher ranks of European mind.
67. The first thing which I remember as an event in life, was being taken by my nurse to the brow of Friar's Crag on Derwentwater. The intense joy, mingled with awe, that I had in looking through the hollows in the mossy roots, over the crag into the dark lake, has associated itself more or less with all twining roots of trees ever since. Two other things I remember as, in a sort, beginnings of life;-crossing Shap-Fells, being let out of the chaise to run up the hills, and going through Glenfarg, near Kinross, on a winter's morning, when the rocks were hung with icicles; these being culminating points in an early life of more travelling than is usually indulged to a child. In such journeyings, whenever they brought me near hills, and in all mountain ground and scenery, I had a pleasure, as early as I can remember, and continuing till I was eighteen or twenty, infinitely greater than any which has been since possible to me in anything.
68. A fool always wants to shorten space and time; a wise man wants to lengthen both. A fool wants to kill space and time; a wise man, first to gain them, then to animate them.
69. I suspect that system makers in general are not or much more use, each in his own domain, than, in that of Pomona, the old women who tie cherries upon sticks, for the more portableness of the same. To cultivate well, and choose well your chcrries, is of some importance; but if they can be had in their own wild way of clustering about their crabbed stalks, it is a better connection for them than any others; and if they cannot, then so that they be not bruised, it makes to a boy of practical disposition not much difference whether he gets them by handfuls, or in beaded symmetry on the exalting stick.
70. Every great man is always being helped by everybody, for his gift is to get good out of all things and all persons.
71. God appoints to every one of His creatures a separate mission, and if they discharge it honourably, if they quit themselves like men, and faithfully follow the light which is in them, withdrawing from it all cold and quenching influence, there will assuredly come of it such burning as, in its appointed mode and measure, shall shine before men, and be of service constant and holy. Degrees infinite of lustre there must always be, but the weakest among us has a gift, however seemingly trivial, which is peculiar to him, and which worthily used will be a gift nlso to his race for ever.
72. There is not any matter, nor any spirit, nor any creature but it is capable of a unity of some kind with
other creatures; and in that unity is its perfection and theirs, and a pleasure also for the beholding of all other creatures that can behold. So the unity of spirits is partly in their sympathy, and partly in their giving and taking always in their love; and these are their delight and their strength; for their strength is in their co-working and army fellowship, and their delight is in their giving and receiving of alternate and perpetual good; their insepa rable dopendency on each other's being, and their essen tial and perfect depending on their Creator's. And so the unity of earthly creatures is thèir power, and their peace not like the dead and cold peace of undisturbed stones and solitary mountains, but the living peace of trust, and the living power of support; of hands that hold each other and are still.*
73. It is good to read of that kindness and humbleness of St. Francis of Assisi, who spoke never to bird, nor to cicada, nor even to wolf and beasts of prey, but as his brother;-and so we find are moved the minds of all good and mighty men, as in the lesson that we have from the "Mariner" of Coleridge, and yet more truly and rightly taught in the "Heartleap Well"-
> "Never to blend our pleasure or our pride With sorrow of the meanest thing that feels"-

[^40]and again, in the "White Doe" of Rylstone, with the added teaching, that anguish of our own
"Is tempered and allayed by sympathies
Aloft ascending, and descending deep,
Even to the inferior kinds"
so that I know not of anything more destructive of the whole theoretic faculty, not to say of the Christian character and human intellect,* than those accursed sports, in which man makes of himself cat, tiger, leopard, and alligator in one; and gathers into one continuance of cruelty, for his amusement, all the devices that brutes sparingly and at intervals use against each other for their necessities.
74. He who loves not God, nor his brother, cannot love the grass beneath his feet, nor the creatures which live not for his uses, filling those spaces in the universe which he needs not; while on the other hand, none can love God, nor his human brother, without loving all things which his Father loves; nor without looking upon them every one as in that respect his brethren also, and perhaps worthier than he, if, in the under concords they have to fill, their part is touched more truly. $\dagger$

[^41]75. Things may always be seen troiy by candid people, though never completely. No human capacity ever yet saw the whole of a thing; but we may see more and more of it the longer we look. Every mdividual temper will see something different in it; but supposing the tempers honest, all the differences are there. Every advance in our acuteness of perception will show us something new; but the old and first discerned thing will still be there, not falsified, only modified and enriched by the new perceptions, becoming continually more beautiful in its harmony with them, and more approved as a part of the infinite truth.
women would;-about everything turning ont right, and being to some good end. For we have no business whatever with the ends of things, but with their beings; and their beingsare often entirel $v$ bad.

## SECTION IX.

## MORALITIES.

76. When people read, "The law came by Moses, but grace and truth by Christ," do they suppose it means that the law was ungracious and untrue? The law was given for a foundation; the grace, (or mercy,) and truth for fulfilment;--the whole forming one glorious Trinity of judgment, mercy, and truth.* And if people would but read the text of their Bibles with heartier purpose of understanding it, instead of superstitiously, they would see that throughout the parts which they are intended to make most personally their own, (the Psalms,) it is always the Law which is spoken of with chief joy. The Psalms respecting mercy are often sorrowful, as in thought of what it cost; but those respecting the law are always full of delight. David cannot contain himself for joy in thinking of it, he is never weary of its praise: "How I love thy law ! it is my meditation all the day. Thy testimonies are my delight and my counsellors; sweeter also than honey and the honey-comb."

[^42]77. I suppose there is no event in the whole life of Christ to which in hours of doubt or fear, men turn with more anxious thirst to know the close facts of it, or with more earnest and passionate dwelling upon every syllable of its recorded narrative, than Christ's showing Himself to His disciples at the Lake of Galilee There is something prëeminently open, natural, full fronting our dis. belief, in this manifestation. The others, recorded after the resurrection, were sudden, phantom-like, occurring to men in profound sorrow and wearied agitation of heart; not, it might seem, safe judges of what they saw. Bat the agitation was now over. They had gone back to their daily work, thinking still their business lay netwards, unmeshed from the literal rope and drag. "Simon Peter saith unto them, I go a-fishing. They say unto him, We also go with thee." True words enough, and having far echo beyond those Galilean hills. That night they caught nothing; but when the morning came, in the clear light of it, behold! a figure stood on the shore. They were not thinking of anything but their fruitless hauls. They had no guess who it was. It asked them simply if they had caught anything. They say, No, and it tells them to cast again. And John shades his eyes from the morning sun with his hand to look who it is; and though the glistening of the sea, too, dazzles him, he makes out who it is at last; and poor Simon, not to be outrun this time, tightens his fisher's coat about him, and dashes in over the nets. One would have liked to see
him swim those hundred yards, and stagger to his knees upon the beach.

Well, the others get to the beach, too, in time, in such slow way as men in general do get in this world to its true shore, much impeded by that wonderful "dragging the net with fishes;" but they get there-seven of them in all, first the Denier, and then the slowest believer, and then the quickest believer, and then the two throneseekers, and two more, we know not who.

They sit down on the shore face to face with Him, and eat their broiled fish as Ho bids. And then to Peter, all dripping still, shivering, and amazed, staring at Christ in the sun, on the other side of the coal-fire,-thinking a little, perhaps, of what happened by another coal-fire, when it was colder, and having had no word changed with him by his Master since that look of His,--to him so amazed, comes the question, "Simon, lovest thou Me?" Try to feel that a little; and think of it till it is true to you: and then take up that infinite monstrosity and hy-pocrisy,-Raphael's cartoon of the charge to Peter. Note first the bold fallacy-the putting all the Apostles there, a mere lie to serve the Papal heresy of the Petric supremacy, by putting them all in the background while Peter receives the charge, and making them all witnesses to it. Note the handsomely curled hair and neatly tied sandals of the men who had been out all night in the seamists, and on the slimy decks; note their couvenient dresses for going a-fishing, with trains that lie a yard along the ground, and goodly fringes-all made to match
an apostolic fishing costume. Note how Peter especially, (whose chief glory was in his wet coat girt about him, and naked limbs,) is enveloped in folds and fringes so as to kneel and hold his keys with grace. No fire of coals at all, nor lonely mountain shore, but a pleasant Italian landscape, full of villas and churches, and a flock of sheep to be pointed at; and the whole group of Apostles, not round Christ, as they would have been naturally, but straggling away in a line, that they may all be shown. The simple truth is, that the moment we look at the picture we feel our belief of the whole thing taken away. There is visibly no possibility of that group ever having existed, in any place, or on any occasion. It is all a mere mythic absurdity, and faded concoction of fringes, muscular arms, and curly heads of Greek philosophers.
78. Among the children of God there is always that fearful and bowed apprehension of His Majesty, and that sacred dread of all offence to Him which is called the Fear of God, yet of real and essential fear there is not any, bur clinging of confidence to Him as their Rock, Fortress, and Deliverer; and perfect love and casting out of fear; so that it is not possible, that, while the mind is rightly bent on Him there should be dread of anything earthly or supernatural; and the more dreadful seems the height of His majesty, the less fear they feel that dwell in the shadow of it. "Of whom shall I be afraid?"
79. If, for every rebuke that we utter of men's vices: we put forth a claim upon their hearts; if from every
assertion of God's demands from them, we could substi tute a display of His kindness to them; if side by side with every warning of death, we could exhibit proofs and promises of immortality; if, in fine, instead of assuming the being of an awful Deity, which men, though they cannot, and dare not deny, are always unwilling, sometimes unable to conceive, we were to show them a near, visible, inevitable, but all benevolent Deity, whose presence makes the earth itself a heaven, I think there would be fewer deaf children sitting in the market-place.
80. If not by sympathy discovered, it is not in words explicable with what divine lines and lights the exercise of godliness and oharity will mould and gild the hardest and coldest countenance, neither to what darkness their departure will consign the loveliest. For there is not any virtue the exercise of which, even momentarily, will not impress a new fairness upon the features.
81. The love of the human race is increased by their individual differences, and the unity of the creature, made perfect by each having something to bestow and to receive, bound to the rest by a thousand various necessities and various gratitudes; humility in each rejoicing to admire in his fellow that which he finds not in himself, and each .boing in some respect the complement of his race.
82. They who are as the angels of God in heaven, yet sannot be conceived as so assimilated that thear different
experiences and affections upon earth shall then be for gotten and effectless ; the child, taken early to his place, cannot be imagined to wear there such a body, nor to have such thoughts, as the glorified apostle who had finished his course and kept the faith on earth. And so, whatever perfections and likeness of love we may attribute to either the tried or the crowned creatures, there is the difference of the stars in glory among them yet;-differences of original gifts, though not of occupying till their Lord come; different dispensations of trial and trust, of sorrows and support, both in their own inward, variable hearts, and in their positions of exposure or of peace, of the gourd shadow and the smiting sun, of calling at heat of day, or eleventh hour, of the house unroofed by faith, or the clouds opened by revelation; differences in warning, in mercies, in sickness, in signs, in time of calling to account; alike only they all are by that which is not of them, but the gift of God's unchangeable mercy. "I will give unto this last even as unto thee."
83. The desire of rest planted in the heart is no sensual nor unworthy one; but a longing for renovation, and for escape from a state whose every phase is mere preparation for another equally transitory, to one in which permanence becomes possible through perfection. Hence the great call of Christ to men, that call on which St. Augustine fixed as the essential expression of Christian hope, is accompanied by the promise of rest; and the death bequest of Christ to men, is peace.
84. He who has once stood beside the grave, to look back upon the companionship which has been forever closed, feeling how impotent, there, are the wild love, and the keen sorrow, to give one instant's pleasure to the pulseless heart, or atone in the lowest measure to the departed spirit, for the hour of unkindness, will scarcely for the future incur that debt to the heart, which can only be discharged to the dust. But the lessons which men receive as individuals, they do not learn as nations. Again and again they have seen their noblest descend into the grave, and have thought it enough to garland the tombstone when they had not crowned the brow, and to pay the honor to the ashes, which they had denied to the spirit. Let it not displease them that they are bidden, amidst the tumult and the dazzle of their busy life, to listen for the few voices, and watch for the few lamps, which God has toned and lighted to charm and to guide them, that they may not learn their sweetness by their silence, nor their light by their decay.
85. In the Cathedral of Lucca, near the entrance door of the north trancept, there is a monument by Jacopo della Quercia to Ilaria di Caretto, the wife of Paolo Guinigi. I name it not as more beautiful or perfect than other examples of the same period; but as furnishing an instance of the exact and right mean between the rigidity and rudeness of the earlier monumental effigies, and the morbid imitation of life sleep, or death, of which the fashion has taken place in modern times. She is lying on
a simpie couch with a hound at her feet; not on the side, but with the head laid straight and simply on the hard pillow, in which, let it be observed, there is no effort at deceptive imitation of pressure.-It is understood as a pillow, but not mistaken for one. The hair is bound in a flat braid over the fair brow, the sweet and arched eyes are closed, the tenderness of the loving lips is set and quiet; there is that about them which forbids breath; something which is not death nor sleep, but the pure image of both. The hands are not lifted in prayer, neither folded, but the arms are laid at length upon the body, and the hands cross as they fall. The feet are hidden by the drapery, and the form of the limbs concealed, but not their tenderness.
86. I do not know any district possessing a wiore pure or uninterrupted fulness of mountain character, (and that of the highest order,) or which appears to have been less disturbed by foreign agencies, than that which borders the course of the Trien between Valarsine and Martigny. The paths which lead to it out of the valley of the Rhone, rising at first in steep circles among the walnut trees, like winding stairs among the pillars of a Gothic tower, retire over the shoulders of the hills into a valley almost unknown, but thickly inhabited by an industrious and patient population. Along the ridges of the rocks, smoothed by old glaziers into long, dark billowy swellings, like the backs of plunging dolphins, the peasant watches the slow colouring of the tufts of moss and roots of herb, which
little by little gather a feeble soil over the irou substance, then, supporting the narrow slip of clinging ground with a few stones, he subdues it to the spade; and in a year or two a little crest of corn is seen waving upon the rocky casque. The irregular meadows run in and out like in. lets of lake among these harvested rocks, sweet with perpetual streamlets that seem always to have chosen the steepest places to come down, for the sake of the leaps, scattering their handfuls of crystal this way and that, as the wind takes them, with all the grace, but with none of the formalism, of fountains; dividing into fanciful change of dash and spring, yet with the seal of their granite channels upon them, as the lightest play of human speech may bear the seal of past toil, and closing back out of their spray to lave the rigid angles, and brighten with silver fringes and glassy films each lower and lower step of sable stone; until at last, gathered altogether again,except perhaps some chance drops caught on the apple blossom, where it has budded a little nearer the cascade than it did last spring,-they find their way down to the turf, and lose themselves in that, silently; with quiet depth of clear water furrowing among the grass-blades, and looking only like their shadow, but presently emerging again in little startled gushes and laughing hurries, as if they had remembered suddenly that the day was too short for them to get down the hill. Green field, and glowing rock, and glancing streamlet, all slope together in the sunshine towards the brows of ravines, where the pines take up their own dominion of saddened shade; and with
everlasting roar, in the twilight, the stronger torrents thunder down, pale from the glaziers, filling all the chasms with enchanted cold, beating themselves to pieces against the great rocks that they have themselves cast down, and forcing fierce way beneath their ghastly poise. The mountain paths stoop to those glens in forky zigzags, leading to some grey and narrow arch, all fringed under its shuddering curve with the ferns that fear the light; a cross of rough-hewn pine, iron-bound to its parapet, standing dark against the lurid fury of the foam. Far up the glen, as we pause beside the cross, the sky is seen through the openings in the pines thin with excess of light; and, in its clear consuming flame of white space, the summits of the rocky mountains are gathered into solemn crowns and circlets, all flushed in that strange, faint silence of possession by the sunshine, which has in it so deep a melancholy, full of power, yet as frail as shadows; lifeless, like the walls of a sepulchre, yet beautiful in tender fall of crimson folds, like the veil of some sea spirit, that lives and dies as the foam flashes; fixed on a perpetual throne, stern against all strength, lifted above all sorrow, and yet effaced and melted utterly into the air by that last sunbeam that has crossed to them from between the two golden clouds.
High above all sorrow? Yes; but not unwitnessing to it. The traveller on his happy journey, as his foot springs from the deep turf, and strikes the pebbles gaily over the edge of the mountain road, sees with a glance of delight the clusters of nut-brown cottages that nestle along thos
sloping orchards, and glow beneath the boughs of the pines. Here, it may rell seem to him, if there be sometimes hardship, there must be at least innocence and peace, and fellowship of the human soul with nature. It is not so. The wild goats that leap along those rocks have as much passion of joy in all that fair work of God as the men that toil among them,-perhaps more. Enter the street of one of the villages, and you will find it foul with that gloomy foulness that is suffered only by torpor, or by anguish of soul. Here, it is torpor-not absolute suffering-not starvation or disease; but darkness of calm enduring: the spring, known only as the time of the scythe, and the autumn as the time of the siokle, and the sun only as a warmth, the wind as a chill, and the mouutains as a danger. They do not understand so much as the name of beauty, or of knowledge. They understand dimly that of virtue. Love, patience, hospitality, faith,these things they know. To glean their meadows side by side, so happier ; to bear the burden up the breathless mountain flank unmurmingly; to bid the strauger arink from their vessel of milk; to see at the foot of their low death-beds a pale figure upon a cross, dying, also patiently; in this they are different from the cattle and from the stones; but, in all this, unrewarded, as far as concerns the present life. For them, there is neither hope nor passion of spirit; for them, neither advance nor exultation. Black bread, rude roof, dark night, laborious day, weary arm at sunset; and life ebbs away. No books, no thcughts, no attainments, no rest,-except only sometimes a little
sitting in the sun under the church wall, as the bell tolls thin and far in the mountain air; a pattering of a few prayers, not understood, by the altar-rails of the dimly gilded chapel,--and so, back to the sombre home, with the cloud upon them still unbroken-that cloud of rocky gloom, born out of the wild torrents and ruinous stones, and unlightened even in their religion, except by the vague promise of some better thing unknown, mingled with threatening, and obscured by an unspeakable horror-a smoke, as it were, of martyrdom, coiling up with the incense; and amidst the images of tortared bodies and lamenting spirits in hurtling flames, the very cross, for them, dashed more deeply than for others with gouts of blood.
87. A Highland scene is beyond doubt pleasant enough in its own way; but, looked close at, has its shadows.* Here, for instance, is the very fact of cne-as pretty as I can remember,-having seen many. It is a little valley of soft turf enclosed in its narrow oval by jutting rocks, and broad flakes of nodding fern. From one side of it to the other winds, serpentine, a clear brown stream, drooping into quicker ripple as it reaches the end of the oval field, and then, first islanding a purple and white rock with an amber pool, it dashes away into a narrow fall of foam under a thicket of mountain ash and alder. The autumn sun, low, but clear, shines on the scarlet ash-

[^43]berries and on the golden-birch leaves, which, fallen rere and there, when the breeze has not caught them, rest quiet in the crannies of the purple rock. Beside the rock, in the hollow under the thicket, the carcase of a ewe, drowned in the last flood, lies nearly bare to the bone, its white ribs protruding through the skin, raven-torn; and the rags of its wool still flickering from the branches that first stayed it as the stream swept it down. A little lower, the current plunges, roaring, into a cireular chasm like a well, surrounded on three sides by a chimney-like hollowness of polished rock, down which the foam slips in detached snow flakes. Round the edges of the pool beneath, the water circles slowly like black oil; a little butterfly lies on its baek, the wings glued to one of the eddies, its limbs feebly quivering; a fish rises, and it is gone. Lower down the stream, I can see over a knoll the green and damp turf roofs of four or five hovels, built at the edge of a morass, which is trodden by the eattle intc a black Slough of Despond at their doors, and traversed by a few ill-set stepping stones, with here and there a flat slab on the tops, where they have sunk out of sight; and at the turn of the brook I see a man fishing, with a boy and a dog-a pieturesque and pretty group enough certainly, if they had not been there all day starving. I know them, and I know the dog's ribs also, which are nearly as bare as the dead ewe's; and the child's wasted shoulders, cutting his old tarten jacket through, so sharp are they.
88. Perhaps there is no more impressive scene on earth; than the solitary extent of the Campagna of Rome under evening light. Let the reader imagine himself for a moment withdrawn from the sounds and motion of the living world, and sent forth alone into this wild and wasted plain. The earth yields and crumbles beneath his feet, tread he never so lightly, for its substance is white, hollow, and carious, like the dusty wreck of the bones of men. The long knotted grass waves and tosses feebly in the evening wind, and the shadows of its motion shake feverishly along the banks of ruin, that lift themselves to the sunlight. Hillocks of mouldering earth heave around him, as if the dead beneath were struggling in their sleep. Scattered blocks of black stone, four-square remnants of mighty edifices, not one left upon another, lie upon them to keep them down. A dull purple poisonous haze stretches level along the desert, veiling its spectral wrecks of massy ruins, on whose rents the red light rests, like dying fire on defiled altars; the blue ridge of the Alban Mount lifts itself against a solemn space of green, clear, quiet sky. Watch-towers of dark clouds stand steadfastly along the promontories of the Apennines. From the plain to the mountains, the shattered aqueducts, pier beyond pier, melt into the darkness, like shadowy and countless troops of 'uneral mourners, passing from a nation's grave.
89. I was coming down one evening from the Rochers de Naye, above Montreux, having been at work among the limestone rocks, where I could get no water
and, both weary and thirsty Coming to a spring at a turn of the path, conducted, as usual, by the herdsmen, into a hollow pine trunk, I stooped to it, and drank deeply. As I raised my head, drawing breath heavily, some one behind me said, "Celui qui boina de cette eau ci, aura encore soif." I turned, not understanding for a moment what was meant, and saw one of the hill peasants, probably returning to his châlet from the market-place at Vevay or Villeneuve. As I looked at him with an uncomprehending expression, he went on with the verse; "Mais celui qui boira de l'eau que je lui donnerai, n'aura jamais soif."
90. It may perhaps be admitted me* to mark the sig: nificance of the earliest mention of mountains in the Mosaic books; at least of those in which some Divine appointment or command is stated respecting them. They. are first brought before us as refuges for God's people from the two judgments of water aud fire. The ark rests upon the mountains of Ararat; and man, having passed through that great Baptism unto death, kneels upon the earth first where it is nearest heaven, and mingles with the mountain clouds the smoke of his sacrifice of thanksgiving. Again; from the midst of the first judgment by fire, the command of the Deity to His servant is, "Escape to the mountain;" and the morbid fear of the hills, which fills any human mind after long stay in places of luxury and

[^44]sin, is strangely marked in Lot's complaining reply, "I cannot escape to the mountain, lest some evil take me." The third mention, in way of ordinance, is a far more solemn one, "Abraham lifted up his eyes, and saw the place afar off." "The Place," the mountain of myrrh, or of bitterness, chosen to fulfil to all the seed of Abraham, far off and near, the inner meaning of promise regarded in that vow: "I will lift up mine eyes unto the hills, from whence cometh mine help." And the fourth is the delivery of the law on Sinai. It seemed then to the monks that the mountains were appointed by their Maker to be to man refuges from Judgment, signs of redemption, and altars of sanctification and obedience; and they saw them afterwards connected in the manner the most touching and gracious, with the death, after his task had been accomplished, of the first anointed Priest; the death, in like manner, of the first inspired Lawgiver; and lastly, with the assumption of His office, by the Eternal Priest, Lawgiver, and Saviour.

Observe the connection of these three events. Although the time of the deaths of Aaron and Moses was hastened by God's displeasure, we have not, it seems to me, the slightest warrant for concluding that the manner of their deaths was intended to be grievous or dishonourable to them. Far from this, it cannot, I think, be doubted that .n the denial of the permission to enter the Promised Land, the whole punishment of their sin was included; and that as far as regarded the manner of their deaths, it must have been appointed for them by their Master, in
all tenderness and love, and with the full purpose of ennobling the close of their service upon the earth. It might have seemed to us more honourable that both should have been perrnitted to die beneath the shadow of the Tabernacle, the congregation of Israel watching by their side; and all whom they loved gathered together to receive the last message from the lips of the meek lawgiver, and the last blessing from the prayer of the anointed. priest. But it was not thus they were permitted to die. Try to realize that going forth of Aaron from the midst of the congregation. He who had so often done sacrifice for their sin, going forth now to offer up his own spirit. He who had stood among them between the dead and the living, and had seen the eyes of all that great multitude turned to him, that by his intercession their breath might yet be drawn a moment more, going forth now to meet the angel of death face to face, and deliver himself into his hand. Try if you cannot walk in thought with these two brothers, and the son, as they passed the outmost tents of Israel, and turned, while yet the dew lay round about the camp, towards the slopes of Mount Hor; talking together for the last time, as step by step they felt the steeper rising of the rocks, and hour after hour, beneath the ascending sun, the horizon grew broader as they climbed, and all the folded hills of Idumea, one by one subdued, showed, amidst their hollows in the haze of noon, the windings of that long desert journey, now at last to close. But who shall enter into the thoughts of the High Priest as his eye followed those paths of ancient
pilgrimage; and through the silence of the arid and endless hills, stretching even to the dim peak of Sinai, the whole history of those forty years was unfolded before him, and the mystery of his own ministries revealed to him; and that other Holy of Holies, of which the mountain peaks were the altars, and the mountain clouds the veil, the firmament of his Father's dwelling, opened to him still more brightly and infinitely as he drew nearer his death?-until at last, on the shadeless summit, from him on whom sin was to be laid no more, from him on whose heart the names of sinful nations were to press their graven fire no longer, the brother and the son took breast-plate and ephod, and left him to his rest. There is indeed a secretness in this calm faith, and deep restraint of sorrow, into which it is difficult for us to enter; but the death of Moses himself is more easily to be conceived, and had in it circumstances still more touching as regards the influence of the external scene. For forty years Moses had not been alone. The care and burden of all the people, the weight of their woe, and guilt, and death, had been upon him continually. The multitude had been laid upon him as if he had conceived them; their tears had been his meat night and day, until he had felt as if God had withdrawn His favour from him, and he had prayed that he might be slain and not see his wretchedness. And now at last the command came, "Get thee up into this mountain." The weary hands that had been so long stayed up against the enemies of Israel, might lean again upon the shepherd's staff, and fold themselves for the
shepherds prayer-for the shepherd's slumber. Not strange to his feet, though forty years unknown, the roughness of the bare monntain path, as he climbed from ledge to ledge of Abarim; nct strange to his aged eyes the scattered clusters of the mountain herbage, and the broken shadows of the cliffs, indented far across the silence of uninhabited ravines; scenes suck as those among which, as now, with none beside him but God, he had led his flocks so often; and which he had left, how painfully! taking upon him the appointed power to make of the fenced city a wilderness; and to fill the desert with songs of deliverance. It was not to embitter the last hours of his life that God restored to him for a day the beloved solitudes he had lost, and breathed the peace of the perpetual hills around him, and cast the world in which he had laboured, and sinned, far beneath his feet in that mist of dying blue;-all sin, all wandering, soon to be forgotten forever. The Dead Seaa type of God's anger, understood by him, of all men, most clearly, who had seen the earth open her mouth, and the sea his depth, to overwhelm the companies of those who contended with his Master-laid waveless beneath him, and beyond it the fair hills of Judah, and the soft plains and banks of Jordan, purple in the evening light as with the blood of redemption, and fading in their distant fulness into mysteries of promise and of love. There, with his unabated strength, his undimmed glance, lying down upon the utmost rocks, with angels waiting near to contend for the spoils of his spirit, he put off his earthly
armour. We do deep reverence to his companion prophet, for whom the chariot of fire came down from heaven; but was his death less noble whom his Lord Himself buried in the vales of Moab, keeping, in the secrets of the eternal councils, the knowledge of a sepulchre, from which he was to be called in the fulness of time, to talk with that Lord upon Hermon of the death that he should accomplish at Jerusalem?

And lastly, let us turn our thoughts for a few moments to the cause of the resurrection of these two prophets. We are all of us too much in the habit of passing it by, as a thing mystical and inconceivable, taking place in the life of Christ for some purpose not by us to be understood, or, at the best, merely as a manifestation of His divinity, by brightness of heavenly light, and the ministering to the spirits of the dead, intended to strengthen the faith of His three chosen apostles. And in this, as in many other events recorded by the Evangelists, we lose half the meaning, and evade the practical power upon ourselves, by never accepting in its fulness the idea that our Lord was "perfect man,"-"tempted in all things like as we are." Our preachers are continually trying, in all manner of subtle ways, to explain the union of the Divinity with the Manhood-an explanation which certainly involves first their being able to describe the nature of Deity itself, or, in p sin words, to comprehend God. They never can explain, in any one particular, the union of the natures; they only succeed in weakening the faith of their hearers as to the entireness of either. The thing
they havo to do is precisely the contrary of this-to insist upon the entireness of both. We never think of Christ enough as God, never enough as Man; the instinctive habit of our minds being always to miss of the Divinity, and the reasoning and enforced habit to miss of the humanity. We are afraid to harbour in our own hearts, or to utter in the hearing of others, any thought of our Lord as hungering, tired, sorrowful, having a human soul, a human will, and affected by events of human life, as a finite creature is; and yet one half of the efficiency of His atonement, and the whole of the efficiency of His example, depend on His having been this to the full. Consider, therefore, the Transfiguration as it relates to the human feelings of our Lord. It was the first definite preparation for His death. He had foretold it to His disciples six days before; then takes with Him the three chosen ones into "an high mountain apart." From an exceeding high mountain, at the first taking on Him the ministry of life, He had beheld and rejected the kingdoms of the earth, and their glory: now, on a high mountain, He takes upon Him the ministry of death. Peter and they that were with Him, as in Gethsemane: were heavy with sleep. Christ's work had to be done alone.

The tradition is, that the Mount of Transfiguration was the summit of Tabor ; but Tabor is neither a high mountain, nor was it in any sense a mountain "apart," being in those years both inhabited and fortified. All the immediately preceding ministries of Christ had been al

Cesarea Philippi. There is no mention of travel southward in the six days that intervened between the warning given to His disciples and the going up into the hill. What other hill could it be than the southward. slope of that goodly mountain, Hermon, which is indeed the centre of all the Promised Land, from the entering in of Hamath unto the river of Egypt; the mount of fruitfulness, from which the springs of Jordan descended to the valleys of Israel? Along its mighty forest avenues, uxitil the grass grew fair with the mountain lilies, His feet dashed in the dew of Hermon, He must have gone to pray His first recorded prayer about death; and from the steep of it, before He knelt, could see to the south all the dwellings of the people that had sat in darkness, and seen the great light, the land of Zabulon and of Naphtali, Galilee of the nations,-could see, even with His human sight, the gleam of that lake by Capernaum and Chorazin, and many a place loved by Him, and vainly ministered to, whose house was now left unto them desolate; and chief of all, far in the utmost blue, the hills above Nazareth, sloping down to His old home; hills on which yet the stones lay loose that had been taken up to cast at Him when He left them forever.
"And as He prayed, two men stood by Him." Amoing the many ways in which we miss the help and hold of Scripture, none is more subtle than our habit of supposing that, even as man, Christ was free from the fear of death. How could he then have been tempted as we are?-since among the trials of the earth, none spring from the dust
more terrible than that fear. It had to be borne by Him, indeed, in a unity, which we can never comprehend, with the foreknowledge of victory,-as. His sorrow for Lazarus with the consciousness of His power to restore Him; but it had to be borne, and that in its full earthly terror; and the presence of it is surely marked for us enough by the rising of those two at His side. When, in the desert, He was girding Himself for the work of life, angels of life came and ministered to Him; now in the fair world, when He is girding Himself for the work of death, the ministrants come to Him from the grave. But, from the grave, conquered. One from that tomb under Abarim, which His own hand had sealed long ago; the other, from the rest into which he had entered without seeing corruption. "There stood by him Moses and Elias, and spake of His decease." Then, when the prayer is ended, first, since the star paused over him at Bethlehem, the full glory falls upon Him from heaven, and the testimony is borne to His everlasting Sonship and power. "Hear ye Him."

If, in their remembrance of these things, and in their en deavour to follow in the footsteps of their Master, religious men of bygone days, closing themselves in the hill-solitudes, forgot sometimes, and sometimes feared, the duties they owed to the active world, we may perhaps pardon them more easily than we ought to pardon ourselves, if we neither seek any influence for good, nor submit to it unsought, in scenes to which thus all the men whose writings we receive as inspired, together with their Lord, retired when ever they had any task or trial laid upon them needing more
than their usual strength of spirit. Nor perhaps should we have unprofitably entered into the mind of the earlier ages, if among our other thoughts, as we watch the chains of the snowy mountains rise on the horizon, we should sometimes admit the memory of the hour in which their Creator, among their solitudes, entcred on His travail for the salvation of our race; and indulge the dream, that as the flaming and trembling mountains of the earth seem to be monuments of the manifesting of His terror on Sinai these pure and white hills, near to the heaven, and sources of all good to the earth, are the appointed memorials of of that light of His mercy, that fell, snow-like, on the Mouat of Transfiguration.


[^0]:    Brantwood, Sept. 2nd, 1872.

[^1]:    * The proper titles of these lectures, too long for page-headings, are given in tb $=$ Contents.

[^2]:    * Educational Series, No. 8, E.

[^3]:    * If the English reader will pronounce the 0 in this word as in fold, and in sophia as in sop, but accenting the 0 , not the $i$, I need not any more disturb my pages with Greek types.

[^4]:    * Pall Mall Gazette. January 29th, 1869.

[^5]:    * I use this word always meaning it to be understood literally $y_{1}$ and in its full force.

[^6]:    * Rubens' rainbow, in the Loan Exhibition this year, was of dull blue, darker than the sky, in a scene lighted from the side of the rainbow. Rubens is not to be blamed for ignorance of optics, but for never having so much as looked at a rainbow carefully: and I do not bclieve that my friend Mr. Alfred Hunt, whose study of rainhow, in the rooms of the Water Colour Society last year, was unrivalled, for vividness and truth, by any I know, learned how to paint it by studying optics.

[^7]:    * I have not seen the picture : in the eagraving the tint of the eyer prould properly represent grey or blue.

[^8]:    * Note this sentence respecting the power of the creative Athena.

[^9]:    * Conversations on War and General Culture

[^10]:    * Now, Ref. 104.

[^11]:    * "Another stride that has been taken appears in the perishing of heraldry. Whilst the privileges of nobility are passing to the middle class, the badge is discredited, and the titles of lordship are getting musty and cumbersome. I wonder that sensible men have not been already impatient of them. They belong, with wigs, pewder, and scarlet coats, to an earlier age, and may be advantageously consigned with paint and tattoo, to the dignitaries of Australia and Polynesia."R. W. Eierrson (English Traite.)

[^12]:    * Charges which "doe peculiarly belong to this art, and are of

[^13]:    * The reader mutst observe, that having been thoroughly disciplined in the Evangelical schools, I supposed myself, at four-andtwenty, to know all about the ordinances of the Almighty. Nevertheless, the practical contents of the sentence are good; if only they ure intelligible, which I doubt.

[^14]:    * I am now a comic illustration of this sentence, myself. I have not a ray of invention in all my brains; but am intonsely rationa. and orderly, and have resolutely begun to set the world to rights.

[^15]:    * Nobody need begin this second volume sentence unless they are breathed like the Græme:-
    " Kigit up Ben Ledi could be press, Aud not a sol his toil confess. '

[^16]:    * Very good. Few people have any idea how much more important the government of the mind is, than the force of its exertion. Nearly all the world flog their horses, without ever looking where thoy are going.
    $\dagger$ I knew nothing, when I wrote this passago, of Luni, Filippo Lippi, or Saudro Butticolli; and had not capacity to enter into the doeper feelings even of the men whom I was chiefly studying,Tinloret and Fra Angelico. But the British public is at present as little acquainted with the greater Florentines as I was then, and the passage, for them, xemains true.

[^17]:    * I should be glad if the reader who is interested in the question here raised, would read, as illustrative of the subsequent staternent, the account of Tintoret's 'Paradise,' in the close of my Oxford leoture on Michael Angelo and Tintoret, which I have printed sepa rately to make it gonerally accessible.

[^18]:    *Passage written in opposition to the vulgar notion that the "more imitation" of Nature is easy, and useless.

[^19]:    * What vestige of Egyptian character is there, for instance, in Cleopatra?-of Athenian in Theseus or Timon?-of old English in Imogen or Cordelia? of old Scottish in Macheth?-or even of mediæval Italian in Petruchio, the Merchant of Venice, or Desdemona? And the Roman plays appear definitely Roman only because the strength of Rome was the eternal strength of the world, - purs family life, sustained by agriculture, and defended by simple and fearless manhood

[^20]:    *I knew nothing of Goethe when I put him with Balzac; hut the intolerable dullness which encumbers the depth of Wilhelm Meister, and the cruel reserve which conceals from all but the intensest readers the meaning of Faust, have made him, in a great degree, an evil influence in European literature; and Evil is always sscond rate.

[^21]:    * I leave this passage, as my friend has choson it ; but it is unintelligible without the contexts, which show how all the emotions described in the preoeding passages of this section, are founded on trust in the beneficence and rule of an Omnipotent Spirit.

[^22]:    * Almost the only pleasure I have, myself, in re-reading my old books, is my sense of having at least done justice to the pine. Compare the passage in this book, No. 47.

[^23]:    * This, and the following passage, have nothing to do with the general statements in the book. They occur with reference only to my own idiosyncrasy. I was much surprised when I found first how individual it was, by a Pre-Raphealite painter's declaring a piece of unwbalesome reedy fen to be more beautiful than Ben. venue.

[^24]:    * At least, I thought so, when I was four-and-twenty. At five-andtwenty, I fanoy that it is just possible there may be other creatures in the universe, to be pleased, or,-it may be,-displeased, by the weather.

[^25]:    *This is a fifth volume bit, and worth more attention.

[^26]:    *Compare, in "Sartor Resartus," the boy's watching from the garden wall.

[^27]:    * I forget now what all this is about. It seems to be a recollection of the Rigi, with assumption that the enthusiastic spectator is to stand for a day and night in observation; to suffer the effects of a severe thunder-storm, and to get neither breakfast nor dinner. I have seen such a storm on the Rigi, however, and more than one such sunrise; and I muoh doubt if its present visitors by rail will see more.

[^28]:    ${ }^{*}$ This passage, to the end of the section, is one of the last, and bost, which I wrote in the temper of my youth; and I can still ratify it, thus far, that the texts referred to in it must either be re ceived as it explains them, or neglected altogether.

[^29]:    * Well noticed. The drawing of the fall of Schaffhausen, which I made at the time of writing this study, was one of the very few, either by other draughtsmen or myself, which I have seen Turnel pause at with serious attention

[^30]:    * I have slightly modified and abridged what follows, being impatient of its prolixity, as well as ashamed of what is truly called the ludicrous underestimate of the mass of the larger streams.

[^31]:    * The whole of this was written merely to show the meaning of Turner's picture of the steamer in distress, throwing up signals. It is a grod study of wild weather; hut, separate from its aim, ntterly feeble in comparison to the few words by which any of the groat poets will describe sea, when they have got to do it. I am rather proud of the short sentence in the "Harbours of England," describing a great breaker against rock;-"One moment, a flint oave,-the next, a marble pillar,-the next, a fading cloud." But there is nothing in sea-description, detailed, like Dickens' storm at the death of Ham, in "David Copperfield."

[^32]:    * I attach great importance to the remaining contents of this passage, and have had occasion to insist on them at great length in recent lectures at Oxiord.

[^33]:    * Passage written after I had got by some years cooler and wiser than when I wrote No. 33, describing however the undulation of the gneiss rocks, which, "where they are, seem to form the world,' in terms more fanciful than I now like.

[^34]:    * Utter misinterpretation of the passage. It is the old age, not tho childhood of earth, which Jeremiah describes in this passage. See its true interpretation in "Fors Clavigera," Letter 46.

[^35]:    * Of course, I had seen every other tried before giving this $f_{2}$ vourable judgment.

[^36]:    * This is a fourth volume passage,-and I will venture to say of it, as Albert Durer, when he was pleased with his work-that for what it has to do, it cannot be much better done. It is a study on the Col de Bon Homme.

[^37]:    * The new road to Chamouni has been carried right through it. A cascade on the right, as you ascend, marks the place spoken of $n$ the text,-once as lonely as Corrie-nan-shian.

[^38]:    * Soldanella Alpina. I think it is the only Alpine flower which actually pierces snow, though I have seen gentians tilling thawed hoof-prints. Crocuses are languid till they have had sunf for a day or two. But the soldanella enjoys its snow, at first, and afterwards its fields. I have se9n it make a pasture look like a large lilac silk gown.

[^39]:    * I forget, now, what I meant by " liberty'" in this passage; but I often used the word in my first writings, in a good sense, think. lug of Scott's moorland rambles, and the like. It is very wonderful to me, now, to see what hopes I had once: but Turner was alive, then; and the sun used to shine, and rivers to sparkle.

[^40]:    * A long, affected, and obscure second volume sentence, written in imitation of Hooker. One short sentence from Proverbs is the sum of it: "How can one be warm alone?"

[^41]:    * I am more and more grieved, as I re-read this and other portions of the most affected and weak of all my books, (written in a moulting time of my life,)-the second volume of " Modern Painters,"一at its morbid violence of passion and narrowness of thought. Yet, at heart, the book was like my others, honest; and in substance it is mostly good; but all boiled to rags.
    $\dagger$ Morbidly Franciscan, again! and I am really compelled te eave out one little bit my friend liked,-as all kindly and hopefu.

[^42]:    * A great deal of the presumption and narrowness caused by my having been bred in the Evangelical schools, and which now fill me with shame and distress in re-reading "Modern Painters," is to my present mind, atoned for by the accurate thinking by which I broke my way through to the great truth expressed in this pas sage, which all my later writings, without exception, save been directed to maintain and illustrate.

[^43]:    * Passage, written to be opposed to an exuberant description, by in amiable Scottish pastor, of everything flattering to Scotchmen .n the Highlands. I have put next to it, a little study of the sadness of Italy.

[^44]:    * With reference to the choice of mountain dwellings by the greater monastic orders.

